

BOSTON  
PUBLIC  
LIBRARY



# 2000 Annual Report

Vital Statistics of Massachusetts

GOVDOC  
6457  
.1  
2000

Massachusetts Department of Public Health  
Public Document No. 1





The Commonwealth of Massachusetts  
Executive Office of Health and Human Services  
Department of Public Health  
Registry of Vital Records and Statistics  
150 Mt. Vernon Street, 1<sup>st</sup> Floor  
BOSTON MA 02125-3105

MITT ROMNEY

GOVERNOR

KERRY HEALEY

LIEUTENANT GOVERNOR

TIMOTHY R. MURPHY

SECRETARY

PAUL J. COTE, JR

COMMISSIONER

December, 2006

To the Honorable Clerks of the  
Senate and House of Representatives:

We have the honor to submit as required by Chapter 111, Section 2 of the General Laws, the one hundred fifty-ninth annual report on statistics of births, deaths, marriages and divorces in Massachusetts for calendar year 2000. The information will also be available to the public via the Department of Public Health website at <http://www.mass.gov/dph>.

Since 1964, the ANNUAL REPORT OF VITAL STATISTICS has been published by the Department of Public Health and is intended to assist in the development of policy and programmatic initiatives within the Department, as well as to provide State officials and agencies, and the general public, with valuable statistical information.

Sincerely,

A handwritten signature in black ink that reads "Stanley E. Nyberg".

Stanley E. Nyberg, Ph.D.  
Registrar



## ACKNOWLEDGEMENTS

This publication of the 2000 ANNUAL REPORT OF VITAL STATISTICS is the result of the combined efforts of all data providers, including the 351 city and town clerks, hospital personnel, physicians, funeral directors, probate courts, clinics, and Department of Public Health personnel. We gratefully acknowledge the assistance provided by all data providers, without whose efforts there would be no vital statistics.

Department of Public Health staff most significantly involved in the production of the 2000 ANNUAL REPORT OF VITAL STATISTICS include:

Jane Purtill, Director, Statistics Unit: supervision of data collection, coding and editing.

Sharon Pagnano and Paul Budrow: coordination of the hospital query program for birth certificate data, specialized data programming, and assistance in developing specialized table production, technical assistance from Maureen McKean (Statistics Unit), Robert Coffin (Nosologist), and Ann-Marie Neault (Nosologist); and Division of Data Processing: data file management and vital events series printouts.

Isabel Caceres, Bruce Cohen, Malena Hood, and James West, Center for Health Information, Statistics, Research, and Evaluation who provided technical assistance and data, including the previously published:

Massachusetts Births 2000: Figures B-4, B-5, B-6, B-7, B-8, B-9, B-10, B-11 and D-3; as well as, Tables B-1, B-2A, B-2BA, B-2B, B-3A, B-3B, B-4, B-5A, B-5B, B-8, B-9, B-10, B-11, B-12, B-13, B-13A, B-14A, B-14B, B-14c, and D-2.

Massachusetts Deaths 2000: Figures C-1, C-2, C-3, C-4, and F-4; as well as, tables C-1, C-2, C-3, C-3B, C-4, C-5, C-5B, C-6, C-7, C-8, C-9, C-10A, C-10B, C-10C, C-11A, C-11B, C-11C, C-12, C14A, C-14B, C-14C, D-1, D-3, and D-4.

The joint efforts of all the staff of the Registry of Vital Records and Statistics are necessary to produce the data contained in this publication. Special acknowledgement is made to the following Registry supervisors:

Howard Wong, Director of Systems and Development, who is responsible for all the computer-based systems in the Registry office;

Pedro Fidalgo, Operations Unit Supervisor, who is responsible for all printing and mailing of forms;

Pauline McNulty, Registration Unit Director, who is responsible for coordination with cities and towns, funeral directors, courts and the overall registration and amendment process;

June Deloney, Registration Unit Supervisor, who is responsible for coordinating timely and accurate document processing.

The 2000 ANNUAL REPORT OF VITAL STATISTICS has been compiled and produced under the general supervision and direction of:

Stanley E. Nyberg, PhD., Registrar of Vital Records and Statistics  
Registry of Vital Records and Statistics

Karin Barrett, Assistant Registrar of Vital Records and Statistics  
Registry of Vital Records and Statistics

Charlene J. Zion, Information Officer  
Registry of Vital Records and Statistics  
Editor

Kevin Y. Foster, Biostatistician  
Registry of Vital Records

Massachusetts Department of Public Health publications and materials can be accessed on the Internet.

World Wide Web: <http://www.mass.gov/dph>

## CONTENTS

TRANSMITTAL LETTER

ACKNOWLEDGMENTS

TABLE OF CONTENTS

INTRODUCTION

### SECTION A--VITAL EVENTS 1

Table A-1	Selected Facts in Vital Statistics, Massachusetts: 2000	5
Figure A-1	2000 Massachusetts Daily Vital Events	6
Table A-2	Number and Crude Rates of Vital Events, Massachusetts and United States: 1999-2000	7
Figure A-2A	Births and Deaths in Massachusetts, Selected Years: 1910-2000	8
Figure A-2B	Rates of Natural Increase in Massachusetts and the United States, Selected Years: 1910-2000	8
Table A-3	Massachusetts Resident Births and Deaths With Resultant Natural Increase, Selected Years: 1900-2000	9
Table A-4	Vital Events by Month, Massachusetts Residents: 2000	10
Table A-4A	Vital Events by Community: 2000	11
Table A-4B	Vital Events by County: 2000	22

### SECTION B—BIRTHS 23

Figure B-1	Daily Birth Statistics, Massachusetts: 2000	35
Table B-1	Trends in Birth Characteristics, Massachusetts: 1980, 1985, 1990-2000	36
Table B-2A	Birth Characteristics by Maternal Race/Hispanic Ethnicity and Birthplace, Massachusetts: 2000	37
Table B-2B	Birth Characteristics by Major Maternal Ancestries, Massachusetts: 2000	38
Figure B-2	Resident Live Births by Mother's Race/Ethnicity: 2000	39
Figure B-3	Resident Live Births by Mother's Age: 2000	40

**SECTION B--BIRTHS (continued)**

Table B-3A	Resident Birth Characteristics, 30 Largest Municipalities, Massachusetts: 2000	41
Table B-3B	Resident Birth Characteristics, Community Health Network Areas (CHNAs), Massachusetts: 2000	43
Table B-4	Age-Specific and Crude Birth Rates, Massachusetts: 1990 and 2000	45
Figure B-4	Trends in the Number of Births by Mother's Age Group, Massachusetts: 1980-2000	46
Figure B-5	Percent of Mothers Breastfeeding or Intending to Breastfeed by Age Group, Massachusetts: 2000	47
Figure B-6	Smoking Prevalence during Pregnancy by Race and Hispanic Ethnicity of Mother, Massachusetts: 2000	48
Figure B-7	The Distribution of Smoking Status during Pregnancy by Smoking Status Prior to Pregnancy, Massachusetts: 2000	49
Table B-5A	Parity by Age of Mother, Massachusetts: 2000	50
Table B-5B	Number and Percent Distribution of Births by Plurality and Age, Massachusetts: 1990-2000	51
Table B-6	Resident Births by Mother's Age, Marital Status and Race/Ethnicity, Massachusetts: 2000	52
Table B-7	Resident Births to Teenage Mothers: 1970-2000	53
Table B-8	Births by Birthweight, Race and Hispanic Ethnicity, Massachusetts: 2000	54
Figure B-8	Low Birthweight among Smoking and Nonsmoking Mothers, by Race and Hispanic Ethnicity, Massachusetts: 2000	55
Table B-9	Low Birthweight by Maternal Age, Race and Hispanic Ethnicity, Massachusetts: 2000	56
Table B-10	Births by Gestational Age, Race and Hispanic Ethnicity, Massachusetts: 2000	57
Figure B-9	Trends in Adequacy of Prenatal Care by Race, Massachusetts: 1980-2000	58
Table B-11	Low Birthweight by Adequacy of Prenatal Care, Race and Hispanic Ethnicity, Massachusetts: 2000	59
Figure B-10	Adequacy of Prenatal Care for Selected Population Characteristics, Massachusetts: 2000	60
Figure B-11	Distribution of Prenatal Care Payment Source, Massachusetts: 2000	61



## SECTION B--BIRTHS (continued)

Table B-12	Birth Characteristics by Source of Prenatal Care Payment, Race, and Hispanic Ethnicity, Massachusetts: 2000	62
Table B-13	Birth Characteristics by Licensed Maternity Facility, Massachusetts: 2000	64
Table B-13A	Caesarean Section Deliveries and Vaginal Births after Caesarean Section (VBACs) by Licensed Maternity Facility, All Births, Massachusetts: 2000	66
Table B-14A	Birth Characteristics: Occurrence and Resident Births and Infant Deaths, Massachusetts Municipalities: 2000	68
Table B-14B	Birth Characteristics: Occurrence and Resident Births and Infant Deaths, Massachusetts Counties: 2000	76
Table B-14C	Birth Characteristics: Occurrence and Resident Births and Infant Deaths, Massachusetts Community Health Network Areas (CHNAs): 2000	77

## SECTION C--DEATHS 79

Figure C-1	Daily Death Statistics, Massachusetts: 2000	85
Table C-1	Trends in Mortality Characteristics, Massachusetts: 1990-2000	86
Figure C-2	Expected Years of Life Remaining at Different Ages by Race and Years of Life Remaining by Race and Gender, Massachusetts: 2000	87
Table C-2	Five Leading Causes of Death Comparability Unmodified and Comparability Modified Age-Adjusted Rates, Massachusetts and United States: 1990-2000	88
Table C-3A	Leading Causes of Death, Numbers and Age-Specific Rates, Massachusetts: 2000	90
Table C-3B	Leading Causes of Death by Age Among the Oldest Age Groups, Numbers and Age-Specific Rates, Massachusetts: 2000	91
Figure C-3	Trends in Deaths from Selected Causes, Massachusetts: 1842-2000	92

## SECTION C--DEATHS (continued)

Table C-4	Leading Causes of Death and Age-Adjusted Death Rates by Race and Hispanic Ethnicity, Massachusetts: 2000	93
Figure C-4	Distribution of Leading Causes of Death, Massachusetts: 2000	94
Table C-5A	Number and Age-Specific Rates for Selected Causes of Death by Race and Hispanic Ethnicity, Massachusetts: 2000	95
Table C-5B	Number and Age-Specific Rates for Selected Causes of Death among the Oldest Age Groups by Race and Hispanic Ethnicity, Massachusetts: 2000	96
Table C-6	Heart Disease and Cancer Deaths by Race and Gender, Comparability Unmodified and Comparability Modified Age-Adjusted Rates, Massachusetts: 1990-2000	97
Table C-7	Number and Age-Adjusted Rates of Cancer Deaths by Selected Causes and Gender, Massachusetts: 2000	99
Table C-8	Selected Causes of Cancer Deaths by Age, Massachusetts: 2000	100
Table C-9	Leading Causes of Cancer Deaths and Age-Adjusted Rates by Race and Hispanic Ethnicity, Massachusetts: 2000	101
Table C-10A	Injury Deaths by Gender, Age, Race and Hispanic Ethnicity: Numbers, Age-Adjusted, and Age-Specific Rates, Massachusetts: 2000	102
Table C-10B	Type of Injury Deaths by Gender: Number and Age-Adjusted Rates, Massachusetts: 2000	104
Table C-10C	Type of Injury Deaths by Manner / Intent Categories: Number and Age-Adjusted Rates, Massachusetts: 2000	105
Table C-11A	HIV/AIDS Deaths by Place of Occurrence, Massachusetts: 1988-2000	106
Table C-11B	HIV/AIDS Deaths by Age, Massachusetts: 1988-2000	107
Table C-11C	HIV/AIDS Deaths by Gender and Race/Ethnicity, Massachusetts: 1988-2000	108

## SECTION C--DEATHS (continued)

Table C-12	HIV/AIDS Deaths by Race, Hispanic Ethnicity, and Gender: Persons Ages 25-44, Massachusetts: 1990-2000	109
Table C-13A	Medical Examiner Certified Deaths by Cause, Race, Sex, and Age, Massachusetts Occurrence: 2000	110
Figure C-5	Proportion of Deaths Certified by Medical Examiner for Selected Causes of Death, Massachusetts Occurrence Deaths: 2000	112
Table C-13B	Medical Examiner Certified Deaths by County, Massachusetts Occurrence: 2000	113
Table C-14A	Selected Causes of Death by Community, 2000	114
Table C-14B	Selected Causes of Death by Community Health Network Area (CHNA), 2000	124
Table C-14C	Selected Causes of Death by County, 2000	125
Table C-15	Resident Deaths by Cause, Sex, and Race, 2000	126

## SECTION D--INFANT & NEONATAL DEATHS 147

Figure D-1	Infant Mortality Rates by Race, Massachusetts: 1980-2000	150
Figure D-2	Neonatal Mortality Rates by Race, Massachusetts: 1980-2000	151
Table D-1	Trends in Infant, Neonatal, and Post-Neonatal Mortality by Race and Hispanic Ethnicity, Massachusetts: 1991-2000	152
Table D-2	Trends in Infant, Neonatal, and Post-Neonatal Mortality by Race, Massachusetts: 1990-2000	153
Table D-3	Infant, Neonatal, and Post Neonatal Deaths by Cause, Massachusetts: 2000	154
Table D-4	Infant Deaths by Major Causes, Race and Hispanic Ethnicity, Massachusetts: 2000	155
Figure D-3	Infant Mortality Rates, Massachusetts: 1842-2000	156

## SECTION E--MARRIAGES & DIVORCES 157

Figure E-1	Rates of Marriages and Divorces per 1,000 Population, Selected Years, Massachusetts: 1900-2000	158
------------	---	-----

## SECTION E--MARRIAGES & DIVORCES (Continued)

Table E-1	Marriages and Divorces by County, Massachusetts Occurrence: 2000	159
Table E-2	Marriages and Divorces and Rates per 1,000 Population, Massachusetts Occurrence: 1900-2000	160
Table E-3	Marriages by Age and Marital Status, Massachusetts Occurrence: 2000	161
Table E-4	Number of Marriages by Age of Bride and Age of Groom, Massachusetts Occurrence: 2000	162
Table E-5	Number of Marriages for Bride by Number of Marriages for Groom, Massachusetts Occurrence: 2000	162

## SECTION F—POPULATION 163

Figure F-1	Massachusetts Population: 1900-2000	164
Table F-1	Population by Race, Age and Sex, Massachusetts: 2000	165
Figure F-2	2000 Massachusetts Population by Age Group	167
Figure F-3	2000 Massachusetts Population by Race	168
Figure F-4	Changes in Age Composition of the Population, Massachusetts: 1900-2000	169
Table F-2	Massachusetts Population by County: 1930-2000	170
Table F-3	Massachusetts Population by City and Town: 1980, 1990 and 2000	171
Table F-4	Population Counts and Estimates, Massachusetts: 1980, 1985-2000	175

## APPENDICES 183

I	Source Documents	
	Standard Certificate of Live Birth	183
	Standard Certificate of Death	184
	Report of Fetal Death	185
	Certificate of Marriage	186
	Certificate of Absolute Divorce or Annulment	187
II	Registry of Vital Records and Statistics Staff	189

## INTRODUCTION

The ANNUAL REPORT OF VITAL STATISTICS (Public Document No. 1) has been published continuously since 1842. This is the 37th edition produced by the Department of Public Health. This report, required under the provisions of Chapter 111, section 2, of the Massachusetts General Laws, tabulates data on Massachusetts births, fetal deaths, deaths, marriages, divorces, and population for calendar year 2000. The report provides its users with an overview of the health status of the Massachusetts population. The report can be accessed at <http://www.mass.gov/dph>.

Vital statistics data may be tabulated either in terms of resident data or occurrence data. Resident data include all events, which occur to residents of the Commonwealth, wherever the events occur. Occurrence data include all those events, which occur within the state, including those which occur to out-of-state residents. There is an interstate exchange of copies of birth, and death records among the fifty states, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and all Canadian provinces. These records are exchanged for statistical purposes only, for events, which occur in states other than where the individual resides. This exchange allows each of the states and provinces to track the births and deaths of their residents. The majority of the data presented in this report for births and deaths is based on resident data. Marriage, divorce, and fetal death data, however, only reflect events that occurred within the Commonwealth.

## REGISTRATION

The first government-operated system of vital events registration anywhere in the world began in the Commonwealth of Massachusetts in 1639 under colonial administration. Prior to that time, in countries with a vital registration system such as England, the responsibility for the registration of vital events had been placed on church officials. The Massachusetts system mandated the registration of vital events by the clerks of the communities. In 1842, the Massachusetts legislature established the first statewide coordination for the registration of these events by requiring that copies of the events registered in the local cities and town be sent to the Secretary of State. The first year of collection was designated for 1841. The collection of data and the production of the ANNUAL REPORT OF VITAL STATISTICS has continued since then. With the exception of the administrative location of the State Registry, the actual mechanics of the system have changed remarkably little over the years.

With limited exceptions, most vital records in Massachusetts are open records. For open birth and death records, there is a triple registration process in Massachusetts. The event is first recorded in the city or town where the event occurred. Beginning in 2000, the clerk of that community was then required to forward the original record to the State Registry. The clerk still sent a certified copy to the community where the person resided at the time of the event. Certified copies of the records may be issued from local or state records. If the record is a restricted birth record, such as those of out-of-wedlock births, the registration occurs only in the community where the event occurred and in the state office unless the mother gives permission for the resident community to receive a copy.

In addition to receiving a legal copy of each birth record from the city or town in which the birth occurred, the State Registry also receives information about the birth record directly from the hospital or birthing center where the birth occurred. These data include confidential medical information in addition to the legal information. This medical information is processed to produce the statistical information on births contained in this report.

Since 1986, the State Registry has developed a program of direct electronic transmission of birth records from hospitals. The system used in Massachusetts is called the Electronic Birth Certificate (EBC). Most birth records are now received through this method. EBC has contributed to reducing processing time at both the hospital and the State Registry, while the system's built-in edits increase the quality of the data.

The process for creating death certificates is the most complex of all vital records. Complete and accurate death records are dependent upon the following individuals: 1.) Certifier, who not only initiates the death registration process but also determines the cause of death as well as the place, time, and date of death; 2.) Funeral Director, who plays the role of facilitator in the death registration process and adds the personal data concerning the decedent, which are supplied by an informant; 3.) Burial Agent, who both issues the permit that allows the chosen disposition to take place and serves as the initial acceptor of the death certificate for official registration; and 4.) City or Town Clerk, who records the death certificate, issues certified copies and forwards the original death record to the Registry of Vital Records and Statistics and other communities as required by law.

Beginning in 1999, the ICD-10 (International Classification of Diseases-Tenth Revision) replaced the ninth revision as a means of classifying cause of death. The ICD-10, developed by the World Health Organization, is an international classification system employed by the United States in order to promote international comparability in collecting, classifying, and tabulating mortality statistics.

The Registry of Vital Records and Statistics receives directly from hospitals or physicians the fetal death reports for fetuses of either twenty or more weeks gestation or weighing at least 350 grams. There are no local filings of fetal death reports.

Marriage licenses may be issued from any of the 351 cities or towns regardless of where the marriage is to take place. The community issuing the license is required to submit an attested copy of the marriage record to the State Registry. For the 2000 marriage records, the event is recorded only in the community where the notice of intention to marry was filed and at the State Registry.

Abstracts of divorces granted are also sent directly to the State Registry from the Registers of Probate from each county probate court.

## STATISTICAL PROCESSING AND TABULATING

The records received in the State Registry are carefully examined for legal errors and inconsistencies. As part of the computerization process, errors and inconsistencies are queried and corrected. A computerized hospital query program is part of the EBC program. The Registry also has a data quality assurance program that includes on-site instruction for clerks and hospital personnel who have reporting difficulties, and training for all groups involved in the data collection process.

Annually, when registration is considered as complete as possible, statistics are aggregated for presentation in this report and in special studies, and for program monitoring and surveillance.

Anyone using statistical information for comparisons over time should be aware of inconsistencies and changing conventions for classification and coding. This is particularly important when using cause of death information. Codes used for classifying cause of death in this report are based on the Tenth Revision of the International Classification of Diseases, World Health Organization. Classification of variables such as race, nativity, and marital status may also differ over time.

It is hoped that this report will be useful to a wide range of health data users in the Commonwealth, as well as to educational planners, demographers, and historians. Questions concerning these data and requests for more detailed findings should be directed to:

Massachusetts Department of Public Health  
Registry of Vital Records and Statistics  
150 Mount Vernon Street  
Dorchester, Massachusetts 02125-3105  
(617) 740-2670





## VITAL EVENTS



## SECTION A

### VITAL EVENTS

#### HIGHLIGHTS

##### BIRTHS

- In 2000, there were 81,582 births to Massachusetts residents.
- Births increased by 0.9% from 1999 to 2000.
- The 2000 Massachusetts birth rate per 1,000 residents was 12.8, equivalent to the birth rate of 12.8 in 1999.
- Massachusetts' 2000 birth rate of 12.8 per 1,000 residents was below the 2000 US rate of 14.4.
- The most births occurred in May (8.8%--7,201 births); the fewest births occurred in February (7.7%--6,296 births).

##### DEATHS

- In 2000, 56,591 Massachusetts residents died.
- The number of resident deaths increased by 1.5% from 1999 to 2000.
- The Massachusetts crude death rate increased from 880.6 deaths per 100,000 residents in 1999 to 891.3 in 2000. The 2000 US crude death rate of 854.0 deaths per 100,000 residents was higher than the 1999 US crude death rate of 857.0. The 2000 age-adjusted death rate in Massachusetts 816.5 per 100,000 residents was 6% lower than the US age-adjusted death rate.
- The most deaths in 2000 occurred in January (9.9%--5,922); the fewest deaths occurred in June (7.3%--4,235).

##### FETAL DEATHS

- There were 421 reportable fetal deaths to Massachusetts residents in 2000.
- The number of reportable fetal deaths increased by 14 from 1999 to 2000, resulting in a fetal death rate of 5.4 per 1,000 live births.

## INFANT DEATHS

- In 2000, 377 infant deaths (less than 1 year of age) occurred to Massachusetts residents.
- The 2000 Massachusetts infant mortality rate of 4.6 deaths per 1,000 live births was a decrease of 11.5% from the 1999 infant mortality rate of 5.2 deaths per 1,000 live births.
- The Black non-Hispanic infant mortality rate increased from 11.4 in 1999 to 11.7 in 2000.
- The Massachusetts 2000 infant mortality rate of 4.6 per 1,000 live births was 33.3% below the US rate of 6.9.

## MARRIAGES

- In 2000, there were 38,603 marriages in Massachusetts.
- The number of marriages in Massachusetts decreased by 2.0% from 1999 to 2000.
- The 2000 Massachusetts rate of 6.1 marriages per 1,000 population was below the US rate of 8.3.
- The most marriages occurred in September (15.2%—5,873); the fewest marriages occurred in January (3.4%—1,320).

## DIVORCES

- In 2000, 15,980 divorces were granted in Massachusetts.
- Divorces in Massachusetts increased by 2.2% from 1999 to 2000.
- The 2000 Massachusetts divorce rate of 2.5 divorces per 1,000 population was below the US rate of 3.9.
- The largest number of divorces were finalized in August (1,404—8.8%), and the fewest in November (1,213--7.6%).

## NATURAL INCREASE

- The rate of natural increase in the Massachusetts resident population remained fairly constant going from 4.0 to 3.9 between 1999 and 2000.
- The 2000 US natural increase rate of 6.1% remains above that of Massachusetts.

The Vital Events section provides basic information on all vital events. In addition to the information highlighted above, this section contains summary birth and death data by city, town and county. More detailed information is contained in the sections on the individual events.

#### DEFINITIONS IMPORTANT FOR THIS SECTION INCLUDE:

##### LIVE BIRTH

A live birth is any infant who breathes or shows any other evidence of life (such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles) after separation from the mother's uterus, regardless of the duration of gestation.

##### FETAL DEATH

A fetal death is a death prior to the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy; the death is indicated by the fact that after such separation, the fetus does not breathe or show any other evidence of life, such as the beating of the heart, pulsation of the umbilical cord, or definite movement of the voluntary muscles.

Massachusetts law requires that fetal deaths of 20 or more weeks gestation or weighing at least 350 grams be reported; therefore, the fetal deaths referred to in this report are of that gestational age or weight.

##### INFANT DEATH

Death of a child whose age is less than one year.

##### MISER

The Massachusetts Institute for Social and Economic Research. This research institute, which was located at the University of Massachusetts in Amherst, produced the official population estimates and projections for the Commonwealth before 1999.

##### NATURAL INCREASE

The difference between the number of resident live births and the number of resident deaths.

##### NEONATAL DEATH

Death of a child whose age is less than 28 days.

## OCCURRENCE

Occurrence data reflect where the event took place without regard to residence. In Massachusetts, place of occurrence will be one of 351 cities or towns.

## RESIDENCE

The usual place of residence as reported by the mother (for births) or the informant (for deaths). An infant's residence is considered that of the mother. While occurrence data include only events that occurred within Massachusetts, residence data for births and deaths include those which may or may not have occurred in Massachusetts.

### CRUDE RATES OF VITAL EVENTS:

BIRTH RATE	$\frac{\text{No. of Resident Live Births}}{\text{Total Resident Population}} \times 1,000$
FETAL MORTALITY RATE	$\frac{\text{Number of Resident Fetal Deaths}}{\text{Resident Live Births} + \text{Resident Fetal Deaths}} \times 1,000$
INFANT MORTALITY RATE	$\frac{\text{No. of Resident Deaths <1 Year}}{\text{Resident Live Births}} \times 1,000$
NEONATAL MORTALITY RATE	$\frac{\text{No. of Resident Deaths <28 Days}}{\text{Resident Live Births}} \times 1,000$
DEATH RATE	$\frac{\text{No. of Resident Deaths}}{\text{Total Resident Population}} \times 100,000$
MARRIAGE RATE	$\frac{\text{No. of Occurrence Marriages}}{\text{Total Resident Population}} \times 1,000$
DIVORCE RATE	$\frac{\text{No. of Occurrence Divorces}}{\text{Total Resident Population}} \times 1,000$

**Table A-1**  
**SELECTED FACTS IN VITAL STATISTICS**  
**MASSACHUSETTS: 2000**

**BIRTH**

Age Range of Mothers: 13-52

Age Range of Fathers: 14-71

Sets of Twins: 1,632

Sets of Triplets: 78

Sets of Quadruplets: 1

Most Births Occurred on: September 1, 2000 (299 births)

Fewest Births Occurred on: January 16, 2000 (139 births)

Highest # of Births at: Brigham and Women's Hospital (10,042)

Lowest # of Births at: Cambridge Birth Center (73 births)

**Twenty Most Popular Names for Boys**

<i>Boys' Names</i>	<i>Number</i>	<i>Boys' Names</i>	<i>Number</i>
Matthew	1,019	William	565
Michael	998	Daniel	551
John	791	Joshua	519
Nicholas	775	Anthony	507
Ryan	704	Zachary	487
Joseph	654	Alexander	484
Andrew	637	Tyler	476
Christopher	637	Kyle	448
Jacob	633	James	447
Benjamin	577	Thomas	443

**Twenty Most Popular Names for Girls**

<i>Girls' Names</i>	<i>Number</i>	<i>Girls' Names</i>	<i>Number</i>
Emily	746	Jessica	370
Hannah	542	Elizabeth	356
Olivia	524	Lauren	320
Julia	503	Nicole	309
Sarah	501	Rachel	305
Emma	489	Victoria	302
Samantha	466	Grace	294
Ashley	392	Caroline	291
Madison	386	Katherine	287
Abigail	384	Kayla	273

**DEATH**

Male Decedents 100 Years and Older: 72

Female Decedents 100 Years and Older: 562

Most Deaths Occurred on: January 10, 2000 (226)

Fewest Deaths Occurred on: September 15, 2000 (106)

Month Most Suicides Occurred: November (44)

Month Most Homicides Occurred: January & December (15)

Month Most Motor Vehicle Deaths Occurred: July (42)

**MARRIAGE**

Ages of Grooms: 16-96 years (average: 34.0)

Ages of Brides: 15-87 years (average: 31.6)

Age of First Time Grooms: 16-83 years (average: 30.1)

Age of First Time Brides: 15-86 (average: 28.3)

Most Popular Month for Marriages: September (5,873)

Least Popular Month for Marriages: January (1,320)

Most Marriages Occurred On: June 24, 2000 (924)

Fewest Marriages Occurred On: January 17, 2000 (2)

Greatest Age Difference When Groom Older than Bride: 58 years

Greatest Age Difference When Bride Older than Groom: 34 years

**DIVORCE**

Length of Marriages Involved in Divorces: < 1 Year to 63 Years of Marriage

Most Common Length of Marriage Prior to Divorce: 4 years

Month Most Divorces Granted: August (1,404)

Month Fewest Divorces Granted: November (1,213)

Figure A-1

## 2000 Massachusetts Daily Vital Events

Each day in 2000, Massachusetts residents had approximately:

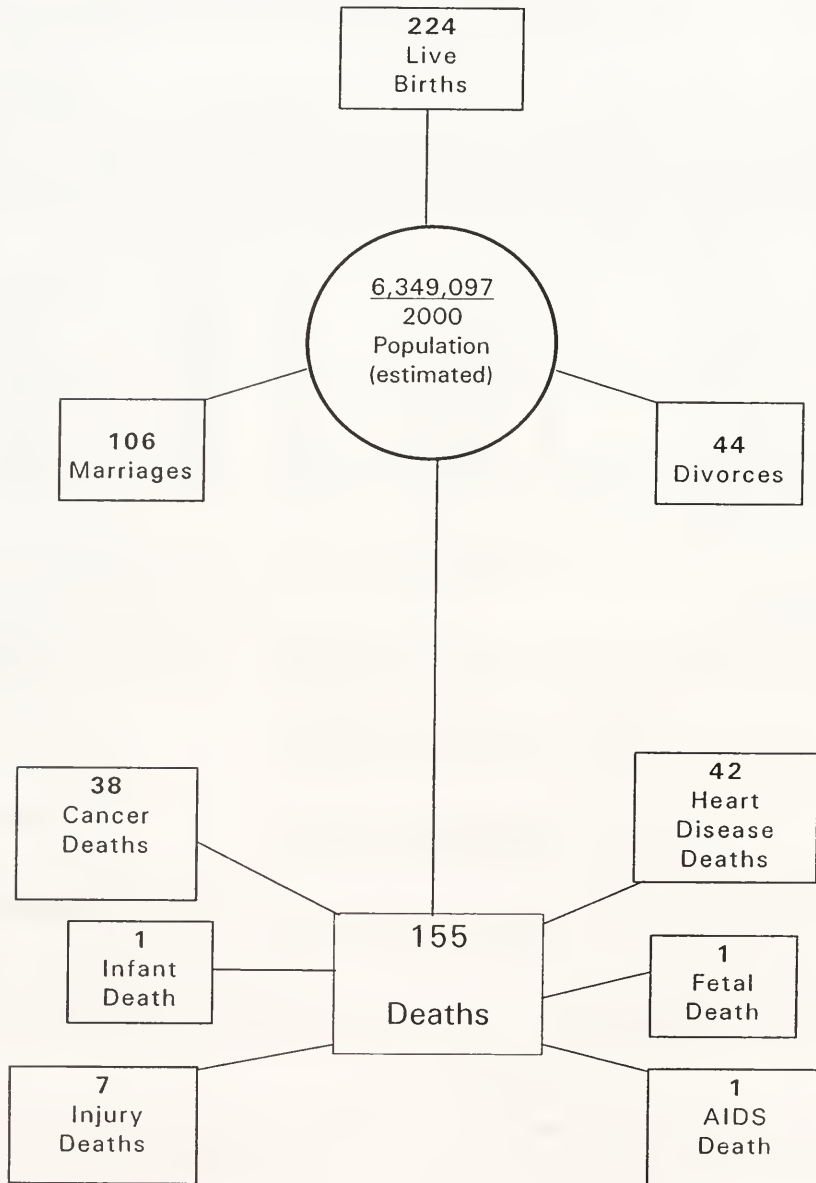




Table A-2. Number and Crude Rates of Vital Events, Massachusetts and United States: 1999-2000

Vital Event	Massachusetts			United States			% of Rate Change	1999	Rate*	Number	Rate	1999	Rate*	Number	Rate*	1999	% of Rate Change
	2000	Number	Rate*	1999	Number	Rate*											
Births	81,582	12.8	80,866	12.8	0	4,058,814	14.4	3,959,417	14.5	-0.7							
Fetal Deaths	440	5.4	426	5.3	1.9	26,788	6.6	26,528	6.7	-1.5							
Total Deaths	56,591	854.0	55,763	880.6	-3.0	2,403,351	854.0	2,394,871	857.0	-0.4							
Infant Deaths	377	4.6	418	5.2	-11.5	28,006	6.9	27,937	7.1	-2.8							
Neonatal Deaths	288	3.5	332	4.1	-14.6	18,671	4.6	18,728	4.7	-2.1							
Marriages	38,603	6.1	39,410	6.2	-1.6	2,329,000	8.3	2,322,109	8.3	0							
Divorces	15,980	2.5	15,632	2.5	0.0	1,100,286	3.9	1,144,065	4.1	-4.9							

\*NOTES: Neonatal and infant deaths are included in total deaths; neonatal deaths are included in infant deaths; fetal deaths are excluded from total deaths. Figures for marriages and divorces reflect occurrence, not residence.  
 The rates for live births, marriages and divorces are per 1,000 population; rates for total deaths are per 100,000 population.  
 Rates for infants and neonatal deaths are per 1,000 live births.  
 Rates for fetal deaths are per 1,000 live births and fetal deaths.  
 National numbers and rates provided by NCHS.

Figure A-2A. Births and Deaths in Massachusetts, Selected Years, 1910-2000

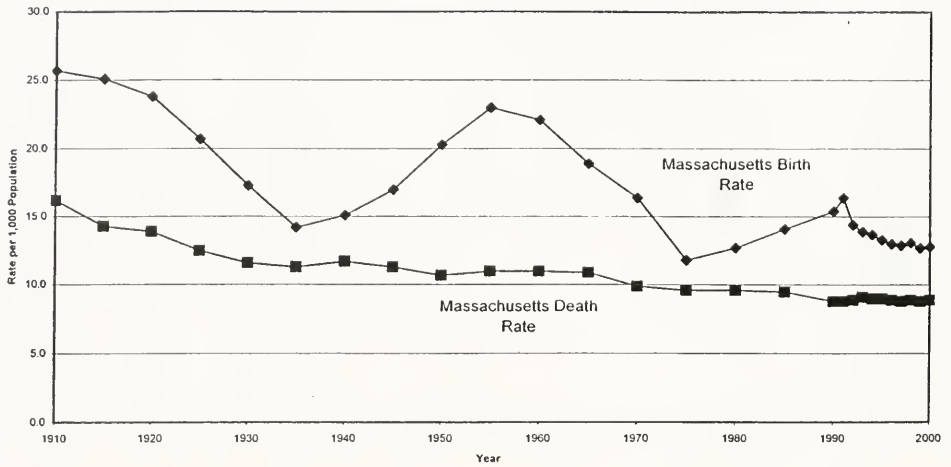
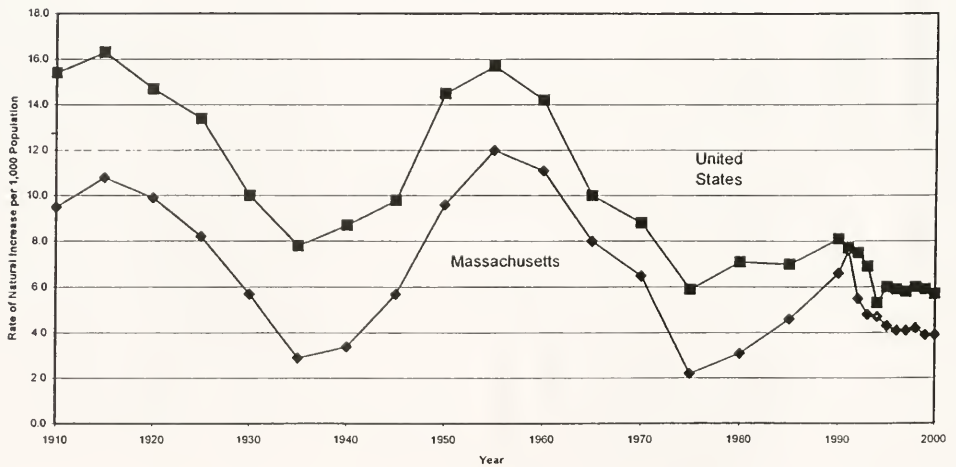


Figure A-2B. Rates of Natural Increase for Massachusetts and the United States, Selected Years, 1910-2000



**Table A-3. Massachusetts Resident Births and Deaths With Resultant Natural Increase**

**Selected Years: 1900-2000**

<b>Year</b>	<b>Births</b>	<b>Deaths</b>	<b>Natural Increase</b>	<b>Rate/1000 Residents</b>
1900	73,386	51,156	22,230	7.9
1905	75,022	50,486	24,536	8.2
1910	86,539	54,407	32,132	9.5
1915	93,155	53,131	40,024	10.8
1920	91,859	53,632	38,227	9.9
1925	86,014	51,890	34,124	8.2
1930	73,690	49,503	24,187	5.7
1935	62,416	49,634	12,782	2.9
1940	65,369	50,698	14,671	3.4
1945	76,455	50,763	25,692	5.7
1950	95,619	50,359	45,260	9.6
1955	109,610	53,386	56,224	11.6
1960	114,018	56,560	57,458	11.2
1965	100,262	58,853	41,409	7.8
1970	93,582	56,944	36,638	6.4
1975	68,070	53,708	14,362	2.5
1980	72,591	54,934	17,657	3.1
1981	73,930	52,813	21,117	3.7
1982	75,749	52,867	22,882	4.0
1983	76,031	54,150	21,881	3.8
1984	78,197	55,189	23,008	4.0
1985	81,781	55,597	26,184	4.5
1986	82,168	55,860	26,308	4.5
1987	84,345	55,562	28,783	4.9
1988	88,047	56,407	31,640	5.4
1989	91,314	53,748	37,566	6.4
1990	92,461	53,008	39,453	6.6
1991	88,176	53,010	35,166	5.8
1992	87,202	53,804	33,398	5.5
1993	84,627	55,557	29,070	4.8
1994	83,758	54,914	28,844	4.7
1995	81,562	55,296	26,266	4.3
1996	80,164	55,187	24,977	4.0
1997	80,321	54,634	25,687	4.1
1998	81,406	55,204	26,202	4.2
1999	80,866	55,763	25,103	4.0
2000	81,582	56,591	24,991	3.9

**Table A-4. Vital Events by Month, Massachusetts Residents: 2000**

		Births	Fetal Deaths <sup>1</sup>	Deaths	Infant Deaths <sup>2</sup>	Neonatal Deaths <sup>2</sup>	Marriages	Divorces
<b>Totals</b>		<b>81,582</b>	440	56,591	377	288	38,603	15,980
<b>January</b>	#	6,578	39	5,922	44	30	1,320	1,288
	Rank	10	5	1	1	1	12	10
<b>February</b>	#	6,296	27	4,970	20	14	1,514	1,314
	Rank	12	11	3	12	12	11	8
<b>March</b>	#	6,841	44	4,820	24	20	1,559	1,398
	Rank	6	2	4	11	10	10	2
<b>April</b>	#	6,691	42	4,463	32	25	2,432	1,318
	Rank	8	4	8	7	5	7	7
<b>May</b>	#	7,201	31	4,568	34	29	3,899	1,297
	Rank	1	9	7	4	2	6	9
<b>June</b>	#	7,041	37	4,235	26	18	4,866	1,381
	Rank	4	7	12	10	11	2	5
<b>July</b>	#	7,068	35	4,373	31	27	4,080	1,389
	Rank	3	8	9	8	4	5	3
<b>August</b>	#	7,169	43	4,340	33	25	4,299	1,404
	Rank	2	3	10	6	5	4	1
<b>September</b>	#	6,779	26	4,302	34	25	5,873	1,365
	Rank	7	12	11	4	5	1	6
<b>October</b>	#	6,855	38	4,775	36	28	4,592	1,383
	Rank	5	6	5	2	3	3	4
<b>November</b>	#	6,467	48	4,587	28	22	2,311	1,213
	Rank	11	1	6	9	9	8	12
<b>December</b>	#	6,596	30	5,236	35	25	1,858	1,230
	Rank	9	10	2	3	5	9	11

<sup>1</sup>Fetal deaths are not included in Births or Deaths. <sup>2</sup>Infant deaths and neonatal deaths are included in total resident deaths; neonatal deaths are included in infant deaths.

TABLE A-4A  
VITAL EVENTS BY COMMUNITY  
2000

COMMUNITY	POPULATION (1)	LIVE BIRTHS OCCURRENCE : RESIDENT :	DEATHS OCCURRENCE : RESIDENT :	INFANT DEATHS TOTAL : (2)	MARRIAGES ISSUED : (3) : (4)	RESIDENT NATURAL INCREASE
STATE TOTAL	6,349,097	82,673 : 81,582	57,510 : 56,591	377 : 288	38,596 : 38,603	24,991
ABINGTON	14,605	1	67	4	65	68
ACON	20,331	2	78	1	1	93
ACUSHNET	10,161	0	24	0	0	158
ADAMS	8,809	1	26	0	0	47
AGANAH	28,144	0	346	2	43	15
ALFORD	399	1	3	0	195	59
AMESBURY	16,450	0	4	0	2	-29
ANDOVER	34,874	3	82	0	0	-3
ANDOVER	31,247	0	98	2	0	2
ARLINGTON	42,389	1	171	0	97	51
ARLINGTON	344	5	0	0	135	12
ASHBURNHAM	1,800	1	12	0	187	102
ASHBY	2,845	0	6	0	10	2
ASHFIELD	14,674	1	39	0	245	165
ATHOL	11,299	0	17	0	19	70
ATTLEBORO	42,068	0	12	0	8	17
AUBURN	15,901	1	176	0	10	9
AVON	4,443	0	7	0	44	157
BARNSTABLE	7,287	1	180	3	65	53
BARRE	47,821	978	991	4	268	183
BECKET	5,113	0	7	0	103	117
BECKET	1,755	0	16	0	26	18
BEDFORD	12,595	0	158	1	41	49
BELCHERTON	12,968	2	32	1	355	438
BELLINGHAM	15,314	2	220	3	31	70
BELMONT	24,194	1	113	3	6	5
BERKLEY	5,749	0	7	0	76	93
BERLIN	2,380	0	4	0	54	39
BERNARDSTON	2,155	0	5	0	112	95
BEVERLY	39,862	2,586	639	2	149	148
BILLERICA	38,981	3	107	4	13	7
					13	9
					10	19
					248	272
					182	149
						265

(1) CENSUS POPULATION ESTIMATES FOR MASSACHUSETTS CITIES AND TOWNS: JULY 1, 2000. POPULATION PROGRAM, MASSACHUSETTS

(2) INFANT AND NEONATAL DEATHS ARE INCLUDED IN TOTAL RESIDENT DEATHS.

(3) MARRIAGE INTENTIONS MAY BE FILED IN ANY MASSACHUSETTS COMMUNITY, REGARDLESS OF WHERE THE BRIDE AND GROOM RESIDE OR WHERE THE MARRIAGE CEREMONY OCCURS.

(4) MARRIAGE FIGURES REFLECT OCCURRENCE, NOT RESIDENCE.

TABLE A-4a  
VITAL EVENTS BY COMMUNITY  
2000

COMMUNITY	POPULATION (1)	LIVE BIRTHS OCCURRENCE: RESIDENT	DEATHS OCCURRENCE: RESIDENT	INFANT DEATHS TOTAL - NEONATAL	MARRIAGES LICENSES: OCCURRENCE ISSUED: (3)	RESIDENT NATURAL INCREASE
STATE TOTAL	6,349,097	82,673	57,510	377	38,596	24,991
BLACKSTONE	8,804	0	16	0	54	5
BLANDFORD	1,214	0	8	0	4	1
BOLTON	4,148	0	2	0	15	33
BOSTON	589,141	23,363	8,108	54	3,555	3,547
BOURNE	18,721	0	247	3	128	15
BOXBOROUGH	4,868	0	61	3	95	20
BOXFORD	7,921	0	73	0	23	40
BOYLSTON	4,008	0	11	0	19	9
BRAintree	33,828	1	9	0	16	68
BRENTREE	10,094	1	452	0	216	146
BRIDGEN	52	52	188	1	69	185
BRIDGEWATER	25,185	1	43	3	89	79
BRIDGEWATER	3,359	0	7	0	10	16
BROOKFIELD	94,304	2,426	1,319	9	559	427
BROOKLINE	3,051	0	6	0	17	21
BUCKLAND	1,991	1	217	0	43	361
BURLINGTON	22,876	2	2	0	10	6
CAMBRIDGE	101,355	2,157	636	2	160	123
CANTON	20,775	1	877	4	873	876
CARLISLE	4,717	1	132	0	115	87
CARVER	11,163	0	4	0	17	34
CHARLEMONT	11,263	0	31	1	51	57
CHARLTON	6,425	0	1	0	5	10
CHATHAM	33,858	2	67	0	46	32
CHELMSFORD	35,080	1	120	0	114	228
CHELSEA	3,401	0	77	3	194	189
CHESHIRE	1,308	0	287	3	306	230
CHESTERFIELD	1,201	0	300	0	13	20
CHICOPEE	54,653	0	42	0	3	4
CHILMARK	843	0	5	0	6	3
CLARKSBURG	1,686	0	3	2	327	337
			274	0	22	56
			9	0	5	4
			18	0		-9

(1) CENSUS POPULATION ESTIMATES FOR MASSACHUSETTS CITIES AND TOWNS: JULY 1, 2000. POPULATION PROGRAM, MASSACHUSETTS

(2) INFANT AND NEONATAL DEATHS ARE INCLUDED IN TOTAL RESIDENT DEATHS.

(3) MARRIAGE INTENTIONS MAY BE FILED IN ANY MASSACHUSETTS COMMUNITY, REGARDLESS OF WHERE THE BRIDE AND GROOM RESIDE OR WHERE THE MARRIAGE CEREMONY OCCURS.

(4) MARRIAGE FIGURES REFLECT OCCURRENCE, NOT RESIDENCE.

TABLE A-4a  
VITAL EVENTS BY COMMUNITY  
2000

COMMUNITY	POPULATION (1)	LIVE BIRTHS OCCURRENCE : RESIDENT :	DEATHS OCCURRENCE : RESIDENT :	INFANT DEATHS TOTAL : NEONATAL (2)	MARRIAGES LICENSES : ISSUED : (3) :	RESIDENT NATURAL INCREASE (4)
STATE TOTAL	6,349,097	82,673 : 81,582	57,510 : 56,591	377 : 288	38,596 : 38,603	24,991
CLINTON	13,435	3	105	0	111	93
COHASSET	7,261	1	48	0	36	108
COLRAIN	1,813	1	3	0	11	12
CONCORD	16,993	1,512	356	2	108	138
CONWAY	1,809	1	1	0	4	7
CUNNINGTON	978	0	2	0	2	-4
DALTON	6,892	0	57	0	24	12
DANVERS	25,212	0	235	1	0	37
DARTMOUTH	30,666	0	264	3	130	290
DEHAM	23,464	0	94	0	145	175
DEERFIELD	4,750	1	142	2	277	166
DENNIS	15,973	1	10	0	24	46
DIGHTON	6,175	0	111	0	116	137
DOUGLAS	7,045	0	18	0	33	30
DOVER	5,558	0	9	0	39	24
DRACUT	28,562	1	5	0	13	12
DUDLEY	10,036	1	63	0	147	112
DUNSTABLE	2,829	0	25	1	63	30
DUNSTABLE	14,248	0	1	0	14	9
DUXBURY	12,974	0	90	0	64	87
EAST BRIDGEWATER	2,097	0	53	2	65	76
EAST BROOKFIELD	14,100	0	284	0	4	11
EAST LONGMEADOW	5,453	0	154	0	76	72
EASTHAM	15,994	1	24	0	31	40
EASTHAMPTON	22,299	0	159	0	110	91
EASTON	3,779	0	41	0	107	131
EGGERTON	1,345	0	93	0	121	203
EGREMONT	1,467	0	16	0	6	12
ERVING	3,267	0	3	0	3	13
ESSEX	38,037	0	18	0	15	31
EVERETT	16,159	0	12	0	270	196
FAIRHAVEN	91,938	1,654	473	3	98	96
FALL RIVER			1,501	1	603	551
				12		28

- (1) CENSUS POPULATION ESTIMATES FOR MASSACHUSETTS CITIES AND TOWNS: JULY 1, 2000. POPULATION PROGRAM, MASSACHUSETTS
- (2) INFANT AND NEONATAL DEATHS ARE INCLUDED IN TOTAL RESIDENT DEATHS.
- (3) MARRIAGE INTENTIONS MAY BE FILED IN ANY MASSACHUSETTS COMMUNITY, REGARDLESS OF WHERE THE BRIDE AND GROOM RESIDE OR WHERE THE MARRIAGE CEREMONY OCCURS.
- (4) MARRIAGE FIGURES REFLECT OCCURRENCE, NOT RESIDENCE.

TABLE A-4A  
VITAL EVENTS BY COMMUNITY  
2000

COMMUNITY	POPULATION (1)	LIVE BIRTHS OCCURRENCE: RESIDENT	DEATHS OCCURRENCE: RESIDENT	INFANT DEATHS TOTAL : NEONATAL (2)	MARRIAGES LICENSSES: OCCURRENCE ISSUED : (3) : (4)	RESIDENT NATURAL INCREASE
STATE TOTAL	6,349,097	82,673	57,510	377	38,596	24,991
FALMOUTH	32,660	653	508	0	246	-107
FITCHBURG	39,102	566	321	3	212	177
FLORIDA	16,246	0	0	0	0	0
FOXBOROUGH	66,910	2,471	48	3	90	105
FRANKLIN	29,560	991	680	5	544	426
FREETOWN	8,472	523	63	2	150	368
GARDNER	20,770	85	14	0	39	33
GEORGETOWN	224	561	325	0	130	-7
GILL	7,377	0	14	2	32	63
GLoucester	1,363	103	2	0	4	-3
GLoucester	30,273	335	309	0	197	33
GOSHEN	921	0	4	0	2	2
GOSNOLD	86	0	0	0	1	0
GRAFTON	14,894	212	29	0	89	107
GRANBY	6,132	56	11	0	40	14
GRANVILLE	1,521	19	0	0	3	7
GREAT BARRINGTON	7,527	160	186	0	80	-55
GREENFIELD	18,168	498	383	0	142	-24
GROTON	9,547	1	11	0	50	116
GROVELAND	6,038	68	15	0	19	36
HADLEY	4,793	2	67	2	21	-20
HALEFAX	7,500	93	14	0	29	40
HAMILTON	8,315	0	11	0	28	62
HAMPDEN	5,171	0	48	0	14	21
HANCOCK	721	0	3	0	6	-1
HANOVER	13,164	0	28	1	63	60
HANSON	9,495	1	16	0	51	69
HARDWICK	2,622	23	5	0	62	-5
HARVARD	5,981	0	28	0	39	8
HARTFORD	12,286	0	7	0	25	-81
HATFIELD	3,249	102	132	0	81	136
HAVERHILL	58,969	314	583	4	15	17
					368	277

- (1) CENSUS POPULATION ESTIMATES FOR MASSACHUSETTS CITIES AND TOWNS: JULY 1, 2000. POPULATION PROGRAM, MASSACHUSETTS
- (2) INFANT AND NEONATAL DEATHS ARE INCLUDED IN TOTAL RESIDENT DEATHS.
- (3) MARRIAGE INTENTIONS MAY BE FILED IN ANY MASSACHUSETTS COMMUNITY, REGARDLESS OF WHERE THE BRIDE AND GROOM RESIDE OR WHERE THE MARRIAGE CEREMONY OCCURS.
- (4) MARRIAGE FIGURES REFLECT OCCURRENCE, NOT RESIDENCE.



TABLE A-4A  
VITAL EVENTS BY COMMUNITY  
2000

COMMUNITY	POPULATION (1)	LIVE BIRTHS		DEATHS		INFANT DEATHS		MARRIAGES		RESIDENT NATURAL INCREASE
		OCCURRENCE :	RESIDENT :	OCCURRENCE :	RESIDENT :	TOTAL :	NEONATAL (2)	ISSUED :	(3) :	(4)
STATE TOTAL	6,349,097	82,673	81,582	57,510	56,591	377	288	38,596	38,603	24,991
HAMLEY	336	0	2	1	3	0	0	0	9	-1
HEATH	805	10	10	4	10	0	0	0	2	0
HINGHAM	19,882	0	291	111	174	0	0	133	192	117
HINGSDALE	1,872	0	10	3	9	0	0	5	5	1
HOLBROOK	10,785	0	139	24	114	0	0	60	45	25
HOLDEN	15,621	0	167	64	118	0	0	65	56	49
HOLLAND	2,407	0	23	5	10	0	0	9	8	13
HOLLISTON	13,801	0	199	25	72	1	0	62	76	127
HOLYOKE	39,838	398	663	752	522	2	2	242	353	141
HOPEDALE	5,907	0	84	29	56	0	0	15	14	28
HOPKINTON	13,546	1	227	25	64	1	1	36	37	163
HUBBARDSTON	3,909	0	59	7	20	0	0	13	7	39
HUDSON	18,113	1	250	36	126	0	0	102	93	124
HULL	11,050	0	107	6	72	0	0	25	40	35
HUNTINGTON	2,174	0	22	0	11	0	0	6	15	11
IPSWICH	12,987	1	121	70	116	0	0	80	184	5
KINGSTON	11,780	0	178	56	105	1	1	49	62	73
LAKEVILLE	9,821	0	130	44	76	0	0	41	47	54
LANCASTER	7,580	2	73	45	65	2	1	13	18	8
LANESBOROUGH	2,990	0	32	0	13	0	0	0	12	19
LAWRENCE	72,043	1,400	1,416	528	546	10	8	310	356	870
LEE	5,985	0	45	60	73	0	0	49	45	-28
LEICESTER	10,471	0	117	76	91	1	1	51	60	26
LENOX	5,077	2	40	58	82	0	0	50	142	0
LEOMINSTER	41,303	1,403	589	508	389	1	1	295	263	200
LEVERETT	1,663	1	10	7	16	0	0	4	9	-6
LEXINGTON	30,355	0	303	231	303	0	0	133	188	0
LEYDEN	772	0	2	0	0	0	0	0	6	2
LINCOLN	8,056	0	106	11	24	0	0	25	90	82
LITTLETON	15,633	0	135	79	74	0	0	46	55	61
LONGMEADOW	105,167	2,830	1,761	155	200	0	0	88	66	-61
LOWELL	105,167	2,830	1,761	1,332	911	10	9	668	552	850

(1) CENSUS POPULATION ESTIMATES FOR MASSACHUSETTS CITIES AND TOWNS: JULY 1, 2000. POPULATION PROGRAM, MASSACHUSETTS

(2) INFANT AND NEONATAL DEATHS ARE INCLUDED IN TOTAL RESIDENT DEATHS.

(3) MARRIAGE INTENTIONS MAY BE FILED IN ANY MASSACHUSETTS COMMUNITY, REGARDLESS OF WHERE THE BRIDE AND GROOM RESIDE OR WHERE THE MARRIAGE CEREMONY OCCURS.

(4) MARRIAGE FIGURES REFLECT OCCURRENCE, NOT RESIDENCE.

TABLE A-4a  
VITAL EVENTS BY COMMUNITY  
2000

COMMUNITY	POPULATION (1)	LIVE BIRTHS OCCURRENCE: RESIDENT	DEATHS OCCURRENCE: RESIDENT	INFANT DEATHS TOTAL (2)	MARRIAGES LICENSES: OCCURRENCE ISSUED: (3)	RESIDENT NATURAL INCREASE
STATE TOTAL	6,349,097	82,673 : 81,582	57,510 : 56,591	377 : 288	38,596: 38,603	24,991
LUDLOW	21,209	0	43	0	133	116
LUNENBURG	9,401	1	21	0	48	70
LYNN	89,050	2	676	12	476	427
LYNNFIELD	11,542	0	88	1	54	99
MALDEN	56,340	0	126	1	362	319
MALDEN	5,228	0	823	1	1	78
MANSFIELD	22,414	1	45	0	44	67
MARBLEHEAD	20,377	0	36	1	118	76
MARTON	5,123	0	23	1	154	156
MARLBOROUGH	36,255	0	111	2	34	39
MARLBOROUGH	4	43	60	3	231	144
MARSHFIELD	24,324	4	316	2	140	106
MASHPEE	12,946	0	37	1	98	135
MATTAPOISETT	6,268	1	53	0	39	57
MAYNARD	10,433	0	20	1	58	43
MEDFIELD	12,273	1	80	1	39	17
MEDFORD	55,765	3	23	0	387	268
MEDWAY	27,134	0	649	2	44	42
MELROSE	27,448	0	82	2	150	121
MELROSE	2,049	383	541	0	23	30
MENDON	61	0	4	0	27	19
MERRIMAC	6,138	0	32	0	234	175
METHUEN	43,789	1,372	574	8	131	109
MIDDLEBOROUGH	19,941	0	91	0	3	5
MIDDLEFIELD	542	0	0	0	27	39
MIDDLETON	7,744	0	8	0	182	113
MILFORD	26,799	776	434	3	86	63
MILBURY	12,784	0	142	1	46	73
MILLIS	7,902	1	125	0	8	11
MILLVILLE	49	39	16	0	132	172
MILTON	2,724	0	5	0	0	0
MILTON	26,062	0	321	0	31	48
MONROE	93	0	273	0	0	0
MONSON	8,359	0	28	0	0	0
MONTAGUE	8,489	5	79	0	40	45
			107	0		-11

- (1) CENSUS POPULATION ESTIMATES FOR MASSACHUSETTS CITIES AND TOWNS: JULY 1, 2000. POPULATION PROGRAM, MASSACHUSETTS
- (2) INFANT AND NEONATAL DEATHS ARE INCLUDED IN TOTAL RESIDENT DEATHS.
- (3) MARRIAGE INTENTIONS MAY BE FILED IN ANY MASSACHUSETTS COMMUNITY, REGARDLESS OF WHERE THE BRIDE AND GROOM RESIDE OR WHERE THE MARRIAGE CEREMONY OCCURS.
- (4) MARRIAGE FIGURES REFLECT OCCURRENCE, NOT RESIDENCE.

TABLE A-4A  
VITAL EVENTS BY COMMUNITY  
2000

COMMUNITY	POPULATION (1)	LIVE BIRTHS : OCCURRENCE : RESIDENT :	DEATHS : OCCURRENCE : RESIDENT :	INFANT DEATHS TOTAL : NEONATAL : (2)	MARRIAGES : LICENSES : OCCURRENCE : ISSUED : (3) : (4)	RESIDENT NATURAL INCREASE
STATE TOTAL	6,349,097	82,673 : 81,582 :	57,510 : 56,151 :	377 : 288 :	38,596 : 38,603 :	24,991
MONTGOMERY	934	0	3	0	4	4
MOUNT WASHINGTON	654	0	4	0	1	2
NAHANT	130	0	1	0	0	7
NAHANT	3,632	0	32	0	25	87
NANTUCKET	9,520	102	41	1	240	320
NATICK	32,170	1	49	0	196	115
NEEDHAM	28,911	2	395	0	130	117
NEEDHAM	247	0	424	1	0	4
NEW ASHFORD	93,768	5	3	0	0	2
NEW BEDFORD	1,559	1,311	1,402	6	596	564
NEW BRAINTREE	927	0	4	0	0	2
NEW MARLBOROUGH	1,494	0	3	0	0	3
NEW SALEM	929	0	5	0	0	22
NEUBURY	6,717	0	7	0	1	4
NEUBURYPORT	17,189	0	11	0	35	43
NEXTON	83,829	900	340	0	164	143
NORFOLK	10,460	886	536	4	611	519
NORFOLK	14,681	129	8	0	36	30
NORTH ADAMS	27,202	319	237	0	95	68
NORTH ANDOVER	27,143	0	187	0	133	180
NORTH BROOKFIELD	4,683	2	195	1	172	109
NORTH BROOKFIELD	13,837	0	89	1	29	23
NORTH READING	28,978	0	11	0	65	62
NORTHAMPTON	14,013	202	58	0	243	229
NORTHBOROUGH	13,182	0	626	0	62	56
NORTHBRIDGE	2,951	0	46	0	97	65
NORTHFIELD	18,036	0	185	0	16	27
NORTON	9,765	0	5	0	74	102
NORWELL	28,587	0	54	0	46	70
NORWOOD	3,713	631	102	0	223	169
OAK BLUFFS	1,673	108	719	1	33	87
OAKHAM	7,518	0	64	0	8	9
ORANGE	6,341	0	2	0	42	35
ORLEANS		0	13	0	74	110
ORLEANS		0	43	0		-55

- (1) CENSUS POPULATION ESTIMATES FOR MASSACHUSETTS CITIES AND TOWNS: JULY 1, 2000. POPULATION PROGRAM, MASSACHUSETTS
- (2) INFANT AND NEONATAL DEATHS ARE INCLUDED IN TOTAL RESIDENT DEATHS.
- (3) MARRIAGE INTENTIONS MAY BE FILED IN ANY MASSACHUSETTS COMMUNITY, REGARDLESS OF WHERE THE BRIDE AND GROOM RESIDE OR WHERE THE MARRIAGE CEREMONY OCCURS.
- (4) MARRIAGE FIGURES REFLECT OCCURRENCE, NOT RESIDENCE.

TABLE A-4A  
VITAL EVENTS BY COMMUNITY  
2000

COMMUNITY	POPULATION (1)	LIVE BIRTHS OCCURRENCE: RESIDENT	DEATHS OCCURRENCE: RESIDENT	INFANT DEATHS TOTAL: NEONATAL	MARRIAGES LICENSES: OCCURRENCE (3) : (4)	RESIDENT NATURAL INCREASE
STATE TOTAL	16,349,097	82,673 : 81,582	57,510 : 56,159	377 : 288	38,596: 38,603	24,991
OTIS	1,365	0	2	0	13	8
OXFORD	13,352	1	49	0	81	69
PALMER	12,497	0	122	0	77	66
PAXTON	4,386	0	33	0	10	13
PEABODY	48,129	1	539	6	277	225
PELHAM	1,403	0	9	0	2	2
PENBROKE	16,927	0	275	1	70	51
PEPPERELL	11,142	0	149	0	41	26
PERU	821	0	15	0	0	0
PETERSHAM	1,180	0	8	0	0	0
PHILLIPSTON	1,621	0	11	0	0	0
PITTSFIELD	45,793	777	3	9	5	2
PLAINFIELD	589	0	0	0	5	10
PLAINVILLE	7,683	1	781	0	1	6
PLYMOUTH	51,701	786	2	595	318	237
PLYMPTON	2,637	0	10	0	4	2
PRINCETON	3,353	0	625	0	45	32
PROVINCETOWN	3,431	0	4	3	345	358
QUINCY	88,025	2	2	0	11	7
RANDOLPH	30,963	1	38	0	11	60
RAYNHAM	11,719	0	743	0	30	46
READING	23,708	1	136	5	804	622
REHOBOTH	10,172	1	111	2	173	163
REVERE	47,283	1	116	1	56	54
RICHMOND	1,604	0	15	0	120	73
ROCHESTER	4,581	0	199	0	34	36
ROCKLAND	17,670	0	4	0	288	257
ROCKPORT	7,767	0	15	0	11	9
ROME	351	0	29	0	32	20
ROWLEY	5,500	0	81	2	101	82
ROYALSTON	1,254	0	37	0	57	125
RUSSELL	1,657	0	1	0	1	1
			33	0	15	14
			3	0	3	5
			0	0	0	7

(1) CENSUS POPULATION ESTIMATES FOR MASSACHUSETTS CITIES AND TOWNS: JULY 1, 2000. POPULATION PROGRAM, MASSACHUSETTS

(2) INFANT AND NEONATAL DEATHS ARE INCLUDED IN TOTAL RESIDENT DEATHS.

(3) MARRIAGE INTENTIONS MAY BE FILED IN ANY MASSACHUSETTS COMMUNITY, REGARDLESS OF WHERE THE BRIDE AND GROOM RESIDE OR WHERE THE MARRIAGE CEREMONY OCCURS.

(4) MARRIAGE FIGURES REFLECT OCCURRENCE, NOT RESIDENCE.

TABLE A-4A  
VITAL EVENTS BY COMMUNITY  
2000

COMMUNITY	POPULATION (1)	LIVE BIRTHS		DEATHS		INFANT DEATHS		MARRIAGES		RESIDENT INCREASE
		OCCURRENCE :	RESIDENT :	OCCURRENCE :	RESIDENT :	TOTAL :	NEONATAL (2)	LICENSES : (3)	OCCURRENCE (4)	
STATE TOTAL	16,349,097	82,673	81,582	57,510	56,591	377	268	38,596	38,603	24,991
RUTLAND	6,353	1	110	5	30	0	0	34	25	80
SALEM	40,407	1,703	515	674	366	1	1	318	272	149
SALISBURY	7,827	0	98	25	72	1	1	53	44	26
SANDSFIELD	824	0	5	3	8	0	0	5	4	-3
SANDWICH	20,136	1	218	99	161	0	0	107	120	57
SAUGUS	26,078	0	286	101	272	1	1	145	144	14
SAVOY	705	0	6	2	6	0	0	1	2	0
SCITUATE	17,863	1	202	109	146	0	0	96	192	56
SEEKONK	13,425	1	135	15	98	1	1	112	96	37
SHARON	17,408	2	213	34	107	1	1	48	78	106
SHELFIELD	3,335	1	28	7	22	0	0	40	25	6
SHELBURNE	2,058	0	21	20	22	0	0	5	12	-1
SHERBORN	4,200	1	52	4	12	1	1	10	56	40
SHIRLEY	6,373	0	64	12	40	0	0	24	52	24
SHREMSBURY	31,640	0	462	92	240	0	0	149	96	222
SHUTESBURY	1,810	3	18	2	8	0	0	0	4	10
SOMERSET	18,234	0	138	110	220	1	1	106	82	-82
SOMERVILLE	77,478	4	928	244	578	6	5	402	331	350
SOUTH HADLEY	17,196	0	143	83	177	0	0	108	108	-34
SOUTHAMPTON	5,387	0	56	10	39	0	0	17	15	17
SOUTHBOROUGH	8,781	1	154	5	38	0	0	43	52	116
SOUTHBURIDGE	17,214	443	242	227	191	0	0	129	101	51
SOUTHWICK	8,835	1	113	15	66	0	0	57	40	47
SPENCER	11,691	0	139	18	87	1	1	72	120	52
SPRINGFIELD	152,082	5,912	2,503	2,237	1,494	15	8	963	862	1,009
STERLING	7,257	0	94	15	34	1	1	37	80	60
STOCKBRIDGE	2,276	0	10	10	17	1	1	32	53	-7
STONEHAM	22,219	0	263	93	254	1	1	142	83	9
STOUGHTON	27,149	1	320	302	235	0	0	185	128	85
STOW	5,902	1	88	4	32	0	0	15	24	56
STURBRIDGE	7,837	0	91	14	77	1	1	98	145	14
SUDBURY	16,841	1	236	97	108	1	0	62	271	128

(1) CENSUS POPULATION ESTIMATES FOR MASSACHUSETTS CITIES AND TOWNS: JULY 1, 2000. POPULATION PROGRAM, MASSACHUSETTS

(2) INFANT AND NEONATAL DEATHS ARE INCLUDED IN TOTAL RESIDENT DEATHS.

(3) MARRIAGE INTENTIONS MAY BE FILED IN ANY MASSACHUSETTS COMMUNITY, REGARDLESS OF WHERE THE BRIDE AND GROOM RESIDE OR WHERE THE MARRIAGE CEREMONY OCCURS.

(4) MARRIAGE FIGURES REFLECT OCCURRENCE, NOT RESIDENCE.

TABLE A-4a  
VITAL EVENTS BY COMMUNITY  
2000

COMMUNITY	POPULATION (1)	LIVE BIRTHS OCCURRENCE: RESIDENT	DEATHS OCCURRENCE: RESIDENT	INFANT DEATHS TOTAL (2)	MARRIAGES LICENSES: OCCURRENCE ISSUED: (3)	RESIDENT NATURAL INCREASE
STATE TOTAL	6,349,097	82,673	57,510	377	38,596	24,991
SUNDERLAND	3,777	0	17	0	17	18
SUTTON	8,250	0	18	1	27	65
SWAMPSCOTT	14,412	0	86	1	56	5
SWANSEA	15,901	0	139	1	73	14
TAUNTON	55,976	637	547	2	397	274
TEMPLETON	6,799	0	41	0	26	20
TEWKSBURY	28,851	0	143	1	173	150
TIBSBURY	3,755	1	15	0	56	5
TOLLAND	426	0	2	0	0	2
TOPSFIELD	6,141	0	68	0	29	14
TOWNSEND	9,198	1	10	0	42	60
TRURO	2,087	0	11	0	16	7
TYNGBOROUGH	11,081	0	14	0	69	142
TYRINGHAM	350	0	3	0	1	4
UPTON	5,642	1	16	1	21	21
UXBRIDGE	11,156	0	28	1	59	78
WAKEFIELD	24,804	0	213	0	140	96
MALES	1,737	0	4	0	9	2
WALPOLE	22,824	0	102	0	112	10
WALTHAM	59,226	302	456	3	410	89
WARE	9,707	196	101	1	50	328
WAREHAM	20,335	488	315	0	151	48
WARREN	4,776	0	17	0	21	148
WARWICK	750	1	0	0	10	19
WASHINGTON	544	0	2	0	3	4
WATERTOWN	32,986	2	148	2	6	26
WAYLAND	13,100	2	56	1	279	145
WEBSTER	16,415	1	238	0	43	82
WELLESLEY	26,613	88	103	0	90	57
WELLFLEET	2,749	0	16	0	103	117
WENDELL	986	0	6	0	24	109
WENHAM	4,440	0	6	0	0	40
					9	1
					8	3

(1) CENSUS POPULATION ESTIMATES FOR MASSACHUSETTS CITIES AND TOWNS: JULY 1, 2000. POPULATION PROGRAM, MASSACHUSETTS

(2) INFANT AND NEONATAL DEATHS ARE INCLUDED IN TOTAL RESIDENT DEATHS.

(3) MARRIAGE INTENTIONS MAY BE FILED IN ANY MASSACHUSETTS COMMUNITY, REGARDLESS OF WHERE THE BRIDE AND GROOM RESIDE OR WHERE THE MARRIAGE CEREMONY OCCURS.

(4) MARRIAGE FIGURES REFLECT OCCURRENCE, NOT RESIDENCE.



TABLE A-4A  
VITAL EVENTS BY COMMUNITY  
2000

COMMUNITY	POPULATION (1)	LIVE BIRTHS OCCURRENCE : RESIDENT :	DEATHS OCCURRENCE : RESIDENT :	INFANT DEATHS TOTAL : NEONATAL (2)	MARRIAGES LICENSES : OCCURRENCE ISSUED : (3) :	RESIDENT NATURAL INCREASE
STATE TOTAL	6,349,097	82,673 : 81,582	57,510 : 56,591	377 : 288	38,596 : 38,603	24,991
WEST BOYLSTON	7,481	0	46	0	58	1
WEST BRIDGEWATER	6,634	0	67	0	41	57
WEST BROOKFIELD	3,804	0	67	0	24	58
WEST NEWBURY	4,149	0	6	0	21	-13
WEST SPRINGFIELD	27,899	0	208	0	15	26
WEST STOCKBRIDGE	1,416	0	7	0	187	-4
WEST YISBURY	2,467	2	2	0	11	-4
WESTBOROUGH	17,997	3	6	0	14	40
WESTFIELD	40,072	1	145	3	21	81
WESTFORD	20,754	1	388	4	108	96
WESTHAMPTON	1,468	0	368	3	236	79
WESTMINSTER	1,468	0	99	0	69	51
WESTON	6,907	0	4	0	2	3
WESTPORT	11,469	1	32	0	35	63
WESTWOOD	14,183	0	86	0	48	95
WEYMOUTH	16,117	0	35	0	79	-81
WHATELY	53,968	3,883	117	1	139	91
WHITMAN	13,573	0	57	0	61	44
WILLIAMSBURG	13,882	0	902	4	304	255
WILLIAMSTOWN	13,473	0	11	0	3	10
WILMINGTON	2,427	0	19	0	100	84
WILMINGTON	8,424	0	38	1	86	87
WINCHESTER	21,363	0	143	0	62	-28
WINCHESTER	9,611	1	4	0	11	11
WINDSOR	20,810	2,478	160	0	48	80
WINTHROP	18,303	0	182	2	86	79
WOBURN	37,258	2	16	0	90	48
WOBURN	172,648	6,223	515	0	116	109
WORTHINGTON	1,270	0	1	0	2	3
WRENTHAM	10,554	0	89	0	114	103
YARPOUTH	24,807	0	204	3	255	211
UNKNOWN	0	0	0	0	1,273	1,205
					5	8
					50	91
					137	185
					0	0

- (1) CENSUS POPULATION ESTIMATES FOR MASSACHUSETTS CITIES AND TOWNS: JULY 1, 2000. POPULATION PROGRAM, MASSACHUSETTS
- (2) INFANT AND NEONATAL DEATHS ARE INCLUDED IN TOTAL RESIDENT DEATHS.
- (3) MARRIAGE INTENTIONS MAY BE FILED IN ANY MASSACHUSETTS COMMUNITY, REGARDLESS OF WHERE THE BRIDE AND GROOM RESIDE OR WHERE THE MARRIAGE CEREMONY OCCURS.
- (4) MARRIAGE FIGURES REFLECT OCCURRENCE, NOT RESIDENCE.

TABLE A-48  
VITAL EVENTS BY COUNTY  
2000

COUNTY	POPULATION (1)	LIVE BIRTHS OCCURRENCE: RESIDENT	DEATHS OCCURRENCE: RESIDENT	INFANT DEATHS TOTAL : NEONATAL	MARRIAGES (3)	DIVORCES (3)	RESIDENT NATURAL INCREASE
STATE TOTAL	6,349,097	82,673	57,510	377	38,603	15,980	24,991
BARNSTABLE	222,230	1,634	2,621	13	2,454	511	-770
BERKSHIRE	134,953	1,262	1,641	3	966	351	-337
BRISTOL	534,678	5,065	4,787	30	3,080	1,501	1,635
DUXES	14,987	112	102	0	456	60	10
ESSEX	723,419	8,280	6,143	54	4,626	2,134	3,020
FRANKLIN	71,535	512	543	1	386	304	7
HAMPDEN	456,228	6,313	5,067	25	2,729	1,333	1,171
HAMPSHIRE	152,251	1,108	1,286	5	802	403	-12
MIDDLESEX	1,465,396	17,164	11,184	81	7,800	2,853	7,540
NANTUCKET	9,520	102	49	1	320	43	87
NORFOLK	650,508	4,624	5,220	24	3,490	1,423	2,726
PLYMOUTH	472,822	3,704	3,454	33	2,695	1,394	2,521
SUFFOLK	689,807	23,365	8,640	57	4,237	1,242	4,082
WORCESTER	750,963	9,428	6,965	50	4,562	2,448	3,302
UNKNOWN	0	0	0	0	0	0	1

(1) CENSUS POPULATION ESTIMATES FOR MASSACHUSETTS COUNTIES: JULY 1, 2000. POPULATION PROGRAM, MASSACHUSETTS

(2) INFANT AND NEONATAL DEATHS ARE INCLUDED IN TOTAL RESIDENT DEATHS.

(3) MARRIAGE AND DIVORCE FIGURES REFLECT OCCURRENCE, NOT RESIDENCE.



## BIRTHS



## SECTION B

### BIRTHS

There were 81,582 live births to Massachusetts residents in 2000, a 0.9% increase from the 80,866 resident live births in 1999. Live births to Massachusetts residents include all births to Massachusetts residents, regardless of the state in which the births occurred. Most data presented in this section are resident data. Table B-13 presents births by licensed maternity facility of occurrence, which includes births to women who live in other states.

#### OCCURRENCE BIRTHS

In 2000, 82,673 births occurred in Massachusetts. All but 295 births occurred at the 54 licensed maternity facilities in this state. The number of babies delivered at these maternity facilities ranged from 73 at Cambridge Birth Center in Cambridge to 10,042 at Brigham and Women's Hospital in Boston. The four hospitals with the greatest numbers of births were Brigham and Women's (10,042), Baystate Medical Center (4,923), Beth Israel Deaconess Medical Center (4,876), and UMASS Memorial Medical Center - West Campus (4,360), and they represented 29.3% of all births occurring in Massachusetts. The distribution of Massachusetts births by hospital size is presented below.

2000 DISTRIBUTION OF MASSACHUSETTS  
OCCURRENCE BIRTHS BY HOSPITAL

NUMBER OF BIRTHS AT HOSPITAL	NUMBER OF HOSPITALS IN CATEGORY	TOTAL NUMBER OF BIRTHS IN CATEGORY	% OF TOTAL BIRTHS
< 500	14	3,550	4.3
500-999	14	10,761	13.0
1000-1499	5	6,696	8.1
1500-1999	9	15,093	18.3
≥ 2000	12	46,278	56.0
All other <sup>1</sup>		295	.4
TOTAL	54	82,673	100.0 <sup>2</sup>

<sup>1</sup> Includes hospitals without maternity units, home births, births en route to hospital and births occurring in a doctor's office/clinic.

<sup>2</sup> Percents do not sum to 100.0 due to rounding.

## BIRTHS BY RACE/ETHNICITY

There are two points to keep in mind when analyzing 2000 data by race/ethnicity. First, since June 1986, information on both race and ethnicity rather than just race has been collected. This provides improved data, particularly for Hispanic births. Presented for comparison below are resident birth data for calendar years 1999 and 2000, utilizing maternal race and Hispanic ethnicity information:

### RACE AND HISPANIC ETHNICITY OF MOTHER 1999 - 2000

MATERNAL RACE/ETHNICITY	2000		1999		CHANGE (1999-2000)
	TOTAL BIRTHS	% OF BIRTHS	TOTAL BIRTHS	% OF BIRTHS	
White non-Hispanic	60,051	73.6	60,402	74.7	-351
Black non-Hispanic	5,755	7.1	5,844	7.2	-89
Hispanic	9,247	11.3	8,815	10.9	432
Asian	4,667	5.7	4,138	5.1	529
Other <sup>1</sup>	1,536	1.9	1,477	1.8	59
Unknown <sup>2</sup>	326	0.4	190	0.2	136
TOTAL <sup>3</sup>	81,582	100	80,866	100	716

<sup>1</sup> Other races include American Indian, Hawaiian, and Other.

<sup>2</sup> Unknown race: mothers did not indicate a race/ethnicity.

<sup>3</sup> Percents do not sum to 100.0 due to rounding.

The other point which must be considered is the method used to present data by race/ethnicity. Massachusetts follows the recommendation from the National Center for Health Statistics (NCHS) for classifying race/ethnicity on the birth certificate according to the self-reported race/ethnicity of the mother. Beginning with 1989 births, birth data are presented by race/ethnicity of the mother only.

## TEEN BIRTHS

The number of births to mothers aged 15-19 decreased slightly from 5,515 in 1999 to 5,305 in 2000. The teen birth rate also decreased, with the rate going from 26.7 in 1999 to the 2000 rate of 25.8 births per 1,000 women aged 15-19. The teen birth rate has declined by 27% since 1990.

## BIRTHS BY MARITAL STATUS

The percentage of births to unmarried women remained fairly stable between 1999 and 2000 at 26.5% of all resident births. Over 90% of mothers under the age of 20 were unmarried while 21.9% of the mothers whose ages were 20 or older were unmarried.

## BIRTHS BY AGE OF MOTHER

The largest percentage increases in births between the years 1999 and 2000 (21.0%) were to mothers in the 45+ age group, as shown below. This percentage is based on relatively few births and should be interpreted with caution.

AGE OF MOTHER	NUMBER OF BIRTHS 2000	NUMBER OF BIRTHS 1999	DIFFERENCE IN THE NUMBER OF BIRTHS 1999-2000	PERCENTAGE CHANGE 1999-2000
< 20	5,395	5,588	-193	-3.5
20-24	11,965	11,813	152	1.3
25-29	19,761	20,382	-621	-3.0
30-34	26,873	26,330	543	2.1
35-39	14,686	13,973	713	5.1
40-44	2,748	2,656	92	3.4
≥ 45	150	124	26	21.0

## BIRTHS BY CAESAREAN SECTION

The number of Caesarean section deliveries in Massachusetts increased from 18,080 in 1999 to 19,390 in 2000, an increase of about 7.2%. Caesarean section was the method of delivery for 23.9% of the 2000 occurrence births, compared to the 21.0% of Caesarean section deliveries in 1999. (Calculations are based on births with known method of delivery.)

## HOSPITAL PROFILES

The following is a synopsis of hospital data, some of which is presented in Table B-13, Occurrence and Caesarean Births by Licensed Maternity Facility:

- In 2000, 81,582 births occurred in Massachusetts, a decrease of 11.8% since 1990. Caesarean section was the method of delivery for 23.9% of 2000 births. (Calculations are based on births with known method of delivery.)
- Statewide, the lowest rates of Caesarean section deliveries were at the following licensed maternity facilities: Heywood Hospital (15.3%), Tobey Hospital (17.1%), St. Vincent Hospital (18.1%), Lawrence General Hospital (18.5%), Berkshire Medical Center (19.2%), and Deaconess Waltham Hospital (19.9%).
- In 2000, at least 10% of the births in seven hospitals were low birthweight. These hospitals were: Baystate Medical Center, Boston Medical Center, Beth Israel Deaconess Medical Center, Brigham and Women's Hospital, New England Medical Center Hospital, St. Elizabeth's Medical Center of Boston, and University of Massachusetts Memorial Medical Center- West Campus.
- In four hospitals, 50% or more of the deliveries were paid with public funds: Boston Medical Center, Hale Hospital, Lawrence General Hospital, and Mercy Hospital. In five facilities, less than 10% of deliveries were paid with public funds: Emerson Hospital, Newton-Wellesley Hospital, South Shore Hospital, The Birthplace at Wellesley, and Winchester Hospital.
- In 2000, 25 of the 54 licensed maternity facilities exceeded the state-wide average (79.0%) for adequacy of prenatal care for their patients. The three maternity facilities with the lowest reported rate of women who had received adequate prenatal care were: Boston Medical Center (45.2%), Cambridge Hospital (59.1%), and North Shore Medical Center- Salem Hospital (53.1%).
- In 2000, the Caesarean section rate was less than 30% for the seventh consecutive year. Fourteen hospitals had Caesarean section delivery rates of 25% or more: Beth Israel Deaconess Medical Center, Brigham and Women's Hospital, Cambridge Hospital, Caritas Good Samaritan Medical Center, Holy Family Hospital and Medical Center, Jordan Hospital, Melrose-Wakefield Hospital, Morton Hospital, Nantucket Cottage Hospital, New England Medical Center Hospital, Newton Wellesley Hospital, South Shore Hospital, St. Elizabeth's Medical Center, and Sturdy Memorial Hospital.

## LOW BIRTHWEIGHT INFANTS

The percentage of low birthweight infants (less than 2,500 grams or five pounds eight ounces) remained fairly constant at 7.1% from 1999 and 2000. The number of low birthweight deliveries also remained fairly constant with 5,708 births in 1999 and 5,711 births in 2000.

## COMMUNITY HEALTH NETWORK AREAS (CHNA)

The Department of Public Health, in collaboration with health service providers, coalition members, and other interested citizens, has designated 27 geographic areas for community health planning. It is the Department's intention to foster in each of these areas the development of Community Health Networks; a consortia of health care providers, human service agencies, schools, churches, youth, parents, elders, advocacy groups, and individual consumers to address the health needs of the community. These community coalitions will participate in monitoring outcomes and the progress of strategies and responses to those health needs. The data published in this edition reflect the new definitions of CHNAs instituted in January 1997.

A Community Health Network Area (CHNA) is defined as an aggregation of cities and towns. (The city of Boston constitutes its own Community Health Network Area.) It is hoped that the networks will mobilize around key health issues impacting the community, promote prevention efforts, enhance access to health care, provide opportunities for more collaboration among agencies, and create a client-centered, outcome-oriented health service delivery system. Community Health Networks will also promote efficiency in service delivery by working to reduce duplication and overlap, and by identifying gaps in service.

## DEFINITIONS IMPORTANT FOR THIS SECTION INCLUDE:

### ADEQUACY OF PRENATAL CARE UTILIZATION

Beginning in 2001, adequacy of prenatal care is being measured using a new method. The Adequacy of Prenatal Care Utilization (APNCU) Index, developed by Dr. Milton Kotelchuck, will replace the Kessner Index, which has been used to date in the Advanced Data Births and Massachusetts Births series. The APNCU Index is the standard used in Healthy People 2010 and by the majority of states. It improves upon the Kessner Index in various ways, the most important being the ability to distinguish between inadequate prenatal care due to the timing of initiation and inadequate care due to insufficient prenatal care visits. The APNCU Index also improves upon the Kessner Index by correcting some of its principle faults. First, the APNCU Index more accurately assesses adequacy of visits for term pregnancies; the Kessner Index characterizes 9 or more visits as adequate, due to an early computer database limitation, which only allowed for a single-digit number to record prenatal care visits. Other faults of the Kessner Index include its bias towards measurement of adequacy of initiation of care, and its various computational algorithms due to inadequate initial documentation.

Table B-1 of this report provides a comparison of data on adequacy of prenatal care from 1996-2000 as measured by these two separate indices. Below are the definitions for the APNCU Index categories and its two component indices (initiation and received services), and the definition of the Kessner Index categories. Also below is a short summary of the major differences in classification of adequacy of prenatal care using the Kessner Index and the APNCU Index.

#### Adequacy of Prenatal Care Utilization (APNCU) Index: Definition of Categories

Category	Month Prenatal Care Began	% of Expected <sup>1</sup> Prenatal Care
Adequate Intensive	1, 2, 3, or 4	110% or more
Adequate Basic	1, 2, 3, or 4	80 – 109%
Intermediate	1, 2, 3, or 4	50 – 79%
Inadequate	Month 5 or later	Less than 50%
Unknown	Prenatal care information not recorded	



Component Indices of the APNCU Index: Definitions of Categories

**Adequacy of Initiation Index**

Category	Month Prenatal Care Began
Adequate	1 or 2
Intensive Adequate Basic	3 or 4
Intermediate	5 or 6
Inadequate	Month 7 or later, or no PNC
Unknown	Prenatal care initiation information not

**Adequacy of Received Services (Visits) Index**

Category	% of Expected <sup>1</sup> Prenatal Care Visits
Adequate	110% or more
Intensive Adequate Basic	80 – 109%
Intermediate	50 – 79%
Inadequate	Less than 50%
Unknown	Information on prenatal care visits not

Kessner Index of Adequacy of Prenatal Care: Definition of Categories

Category	Trimester Care Began	Number of Visits
Adequate	1	9 or more
Intermediate	1	5-8
	2	5 or more
Inadequate	1	1-4
	2	1-4
	3	1 or more
No prenatal	--	0
Unknown	Unknown	Unknown

Summary of Major Differences in Categorization of Adequacy of Prenatal Care between the Kessner Index and the APNCU Index

The two different methods used in the Kessner Index and APNCU Index to calculate adequacy of prenatal care can result in differences in how each one classifies adequacy of prenatal care. These differences only occur under certain conditions, not in all cases (see "Explanation" column).

The Kessner Index classifies prenatal care as...	... but the APNCU Index classifies prenatal care as ...	Explanation
Intermediate	Adequate Basic	This is primarily due to the fact that the APNCU Index allows for prenatal care in the 4 <sup>th</sup> month of pregnancy to be considered adequate if the mother received 80-109% of expected visits, whereas the Kessner Index only allows for care begun in the first trimester (months 1-3) to be considered adequate.
Intermediate	Inadequate	This is primarily due to the fact that the APNCU categorizes any prenatal care beginning after month 4 as "inadequate" whereas the Kessner Index allows for care beginning in months 5 or 6 with 5 or more visits to be "intermediate."
Adequate	Intermediate	This is primarily due to the consideration of "expected" visits (based on when the mother initiated care and the length of gestation) using the APNCU Index, which bases expected visits on the ACOG recommendations, <sup>1</sup> which can be as high as 14 visits if a gestational period is 40 weeks, whereas the Kessner Index considers 9 visits sufficient in all cases.
Adequate	Adequate Intensive	The APNCU Index added an "Adequate Intensive" category, which is not used in the Kessner Index. This allows analysis of situations in which more than normal care is received (e.g. women with high risk conditions, pregnancy complications).

## ANCESTRY

A self-reported item on the birth certificate, with listings and an open text field. The items listed are:

Puerto Rican	Cambodian	Cape Verdean	Other African
Dominican	Asian Indian	Brazilian	Lebanese
Mexican	Korean	Other Potuguese	Iranian
Cuban	Filipino	Haitian	Israeli
Columbian	Japanese	Jamaican	Other Mid. Eastern
Salvadorian	Loatian	Barbadian	Native American
Other Central Amer.	Pakistani	Other West Indian / Caribbean	
Other South Amer.	Thai	African American	European
Other Hispanic	Hawaiian	Nigerian	Other
Chinese	Other Asian/Pac. Isl.		

## BIRTHWEIGHT

The weight of an infant recorded at the time of delivery. It may be recorded in either pounds/ounces or grams. If recorded in pounds/ounces, it is converted to grams for use in this report.

1 pound = 453.6 grams

1,000 grams = 2 pounds, 3 ounces

## BIRTHWEIGHT CATEGORIES

Normal birthweight (NBW)	An infant's weight of 2,500 grams (5.5 pounds) or more recorded at birth.
Low birthweight (LBW)	An infant's weight of less than 2,500 grams (5.5 pounds) recorded at birth.
Very low birthweight (VLBW)	An infant's weight of less than 1,500 grams (3.3 pounds) recorded at birth.

## CAESAREAN SECTION or C-SECTION

Primary: A mother's first Caesarean section delivery.

Repeat: A Caesarean delivery that has been preceded by at least one Caesarean delivery.

## ETHNICITY

See Race.

## FOREIGN-BORN WOMEN

Women not born in the United States, its possessions or protectorates. Women born in Puerto Rico, the US Virgin Islands, and Guam are not foreign-born.

## HEALTHY START

A Massachusetts-funded program providing services and financing for prenatal care to low-income pregnant women who lack health insurance, but do not qualify for Medicaid.

## INFANT

A child whose age is less than one year (365 days).

## LIVE BIRTH

A live birth is any infant who breathes or shows any other evidence of life (such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles) after separation from the mother's uterus, regardless of the duration of gestation.

## LOW BIRTHWEIGHT (LBW)

See Birthweight Categories.

## NEONATAL

Referring to a child under 28 days of age.

## NORMAL BIRTHWEIGHT (NBW)

See Birthweight Categories.

## OCCURRENCE BIRTH

A birth occurring in the Commonwealth of Massachusetts, regardless of the residency of the mother. In Massachusetts, the place will be one of the 351 cities or towns. See Resident Birth.

## PARITY

Total number of live births, including the present birth, ever born to the mother.

## PLURALITY

The number of births to a woman produced in the same gestational period. A singleton is the birth of one infant, twins represent the births of two infants, etc.

## POST NEONATAL

Referring to a child whose age is at least 28 days, but less than one year.

## PRIMARY CAESAREAN SECTION or C-SECTION

See Caesarean Section.

## RACE

Race of mother: For data presented in this publication, mother's race is as reported by the infant's mother. The tables that use race or ethnicity in this document all refer to the mother's race or ethnicity.

Ethnicity: Beginning in 1986, an identifier for Hispanic and other ethnicities was added to the birth certificate. Prior to this change, most Hispanics were included with whites and it was not possible to accurately calculate Hispanic-specific rates of natality.

## REPEAT CAESAREAN SECTION or C-SECTION

See Caesarean Section.

## RESIDENT BIRTH

The birth of an infant whose mother reports that her usual place of residence is in Massachusetts. In Massachusetts, a resident is a person with a permanent address in one of the 351 cities or towns. Vital statistics data may be presented in terms either of residence or occurrence. Unless otherwise noted, all data in this publication are resident data. Resident data include all events that occur to residents of the Commonwealth, wherever they occur. Occurrence data include all events that occur within the state, whether to residents or non-residents. There is an exchange agreement among the 50 states, Canada, Puerto Rico, Guam, the Virgin Islands, and the District of Columbia that provides for exchange of copies of birth and death records. These records are used for statistical purposes only, and allow each state or province to track the births and deaths of its residents.

## VAGINAL BIRTH AFTER CAESAREAN (VBAC)

A vaginal delivery of an infant to a mother who had had at least one prior Caesarean section delivery.

## VERY LOW BIRTHWEIGHT (VLBW)

See Birthweight Categories.

RATES IMPORTANT FOR THIS SECTION INCLUDE:

AGE-SPECIFIC BIRTH RATE	$\frac{\text{No. of Resident Live Births for a Specific Age Group of Mothers}}{\text{Total Female Population of That Specific Age Group}} \times 1,000$
CRUDE BIRTH RATE	$\frac{\text{No. of Resident Live Births}}{\text{Total Resident Population}} \times 1,000$
GENERAL FERTILITY RATE	$\frac{\text{No. of Resident Live Births}}{\text{Total Female Population of Childbearing Age (15-44)}} \times 1,000$
CAESAREAN SECTION or C-SECTION RATE	$\frac{\text{No. of Resident Births Delivered by C-Section}}{\text{Total Number of Resident Births}} \times 100$

Figure B-1. Daily Birth Statistics, Massachusetts: 2000

Every day in 2000, residents of Massachusetts experienced an average of:



224 Births



52 Births by Caesarean Section



48 Births to women aged 35 or older



46 Births with less than adequate prenatal care



16 Births weighing less than 2500 grams or 5 lbs. 8 oz. (low birthweight)



15 Births to women aged 15 through 19

Table B-1. Trends in Birth Characteristics, Massachusetts: 1980, 1985, 1990-2000

Characteristic	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Births <sup>1</sup>	n <sup>2</sup> Rate <sup>3</sup>	72,591 53.4	81,781 57.5	92,461 62.1	88,176 59.4	87,202 59.1	84,627 57.6	83,758 57.0	81,562 55.5	80,164 54.6	80,321 54.7	81,406 55.6	81,582 57.2
Race of Mother													
White <sup>4</sup>	n % <sup>5</sup>	66,220 91.2	71,854 87.9	80,775 87.4	76,983 87.3	76,052 87.2	73,704 87.1	72,980 87.1	71,083 87.2	69,485 86.7	69,503 86.5	70,452 86.5	69,371 85.0
Black	n % <sup>5</sup>	4,626 6.4	5,099 6.2	7,729 8.3	7,352 8.3	7,203 8.3	6,916 8.2	6,713 8.0	6,299 7.7	5,946 7.4	6,182 7.7	6,337 7.8	6,445 7.9
Asian/Other <sup>6</sup>	n % <sup>5</sup>	1,069 1.5	1,741 2.1	3,688 4.0	3,566 4.0	3,582 4.1	3,664 4.3	3,790 4.5	3,817 4.7	3,950 4.9	4,217 5.3	4,248 5.2	4,615 5.7
Unknown	n % <sup>5</sup>	676 0.9	3,087 3.8	269 0.3	275 0.3	365 0.4	343 0.4	275 0.3	363 0.4	783 1.0	419 0.5	369 0.5	422 0.7
Teen Births (Ages 15-19)	n Rate <sup>3</sup>	7,694 28.1	6,859 28.7	7,258 35.4	6,892 35.4	6,555 34.5	6,469 34.0	6,412 33.2	5,990 30.3	5,758 28.5	5,801 28.5	5,823 28.1	5,305 25.8
Births to Unmarried Mothers	n %	11,356 15.6	15,044 18.4	22,837 24.7	22,852 25.9	22,612 25.9	22,345 26.4	22,302 26.6	20,857 25.6	20,253 25.3	20,640 25.7	21,191 26.0	21,621 26.5
Low Birthweight	n %	4,413 6.1	4,751 5.8	5,388 5.8	5,199 5.9	5,137 5.9	5,202 6.2	5,335 6.4	5,174 6.4	5,105 6.4	5,617 7.0	5,655 7.0	5,711 7.1
Adequate Prenatal Care													
Kessner Index <sup>7</sup>	%	82.0	79.4	80.1	81.6	82.9	83.8	84.3	84.2	79.9	80.0	79.8	79.1
APNCU Index <sup>8</sup>	%										82.9	82.9	83.3

NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated. Data on birthweight and adequacy of prenatal care were not provided for approx. 1,140 resident births from Winchester Hospital.

1. Births presented in all tables are resident live births unless otherwise specified. 2. Differences in numbers of births from previous publications are the result of updated files. 3. Birth rates represent the total number of births to women ages 15-44 years per 1,000 females ages 15-44. Teen birth rates refer to number of births per 1,000 women age 15-19. 2000 birth rates are calculated using DPH 2000 population estimates, based on U.S. Census 2000 population counts. 1999 rates are calculated using the 1999 DPH Massachusetts population estimates. PLEASE NOTE: DIFFERENCES BETWEEN THESE RATES AND PREVIOUSLY PUBLISHED DATA REFLECT UPDATES IN POPULATION ESTIMATES. 4. On tables and graphs that include data prior to June 1986, the race classifications do not include an ethnicity component; most Hispanics are included in the race category of White. 5. Percentages are calculated on all births, including those to mothers of unknown race. 6. Other races include American Indian and others not specified. 7. Adequacy of prenatal care in Massachusetts has historically been measured with the Kessner Index, based on the timing of care and number of visits. This measure is calculated based on only those births with known adequacy of prenatal care. Changes in the calculation of the Kessner Index in 1996, as well as computational adjustments made for 1996-2000 data, make data prior to 1996 non-comparable to data from 1996 onward. 8. The APNCU Index will replace the Kessner Index beginning with next year's publication.



Table B-2A. Birth Characteristics by Maternal Race/Hispanic Ethnicity and Birthplace, Massachusetts: 2000

Race and Hispanic Ethnicity (by mother's birthplace)	Births <sup>1</sup>		Teen Births						Birthweight						Prenatal Care						Caesarean Section						Breast Feeding <sup>4</sup>					
			<18 Years		<20 Years		Very Low <sup>2</sup>		Low <sup>3</sup>		Adequate		First Trimester		Caesarean Section		Breast Feeding <sup>4</sup>															
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%														
State Total	81,582	100.0	1,829	2.2	5,395	6.6	1,090	1.4	5,711	7.1	63,109	79.1	66,952	83.8	19,086	23.8	58,188	73.8														
U.S. States / D.C.	62,277	76.3	1,412	2.3	4,119	6.6	808	1.3	4,320	7.1	49,688	81.7	52,602	86.4	14,846	24.3	42,509	71.0														
Puerto Rico/U.S. Terr. <sup>6</sup>	2,263	2.8	185	8.2	499	22.1	47	2.1	224	9.9	1,548	69.1	1,663	74.2	487	21.8	1,530	68.5														
Non-U.S.-Born <sup>7</sup>	17,042	20.9	232	1.4	777	4.6	235	1.4	1,167	6.9	11,873	70.9	12,687	75.6	3,753	22.3	14,149	84.4														
White, Non-Hispanic	60,051	73.6	714	1.2	2,500	4.2	675	1.1	3,780	6.4	48,820	83.2	51,551	87.8	14,474	24.6	42,287	73.3														
U.S. States / D.C.	54,744	91.2	686	1.3	2,374	4.3	619	1.2	3,491	6.5	44,740	83.6	47,253	88.3	13,268	24.8	37,860	72.1														
Puerto Rico/U.S. Terr. <sup>6</sup>	34	0.1	1	-- <sup>5</sup>	2	-- <sup>5</sup>	0	0.0	3	-- <sup>5</sup>	29	87.9	29	87.9	5	14.7	27	84.4														
Non-U.S.-Born <sup>7</sup>	5,273	8.8	27	0.5	124	2.4	56	1.1	286	5.5	4,051	78.3	4,269	82.4	1,201	23.1	4,400	85.7														
Black, Non-Hispanic	5,755	7.1	237	4.1	690	12.0	196	3.4	690	12.0	3,729	65.8	4,046	70.9	1,415	24.7	4,182	73.3														
U.S. States / D.C.	3,250	56.5	216	6.6	606	18.6	123	3.8	434	13.4	2,115	66.1	2,304	71.5	756	23.4	2,022	62.9														
Puerto Rico/U.S. Terr. <sup>6</sup>	22	0.4	0	0.0	3	-- <sup>5</sup>	1	-- <sup>5</sup>	3	-- <sup>5</sup>	15	71.4	16	76.2	3	-- <sup>5</sup>	20	95.2														
Non-U.S.-Born <sup>7</sup>	2,483	43.1	21	0.8	81	3.3	72	2.9	253	10.2	1,599	65.3	1,726	70.0	656	26.5	2,140	86.6														
Hispanic	9,247	11.3	730	7.9	1,765	19.1	135	1.5	756	8.2	6,153	67.0	6,631	72.1	1,884	20.5	6,933	75.4														
U.S. States / D.C.	3,037	32.8	423	13.9	900	29.6	52	1.7	303	10.0	2,036	67.6	2,201	73.0	579	19.2	1,864	61.9														
Puerto Rico/U.S. Terr. <sup>6</sup>	2,189	23.7	184	8.4	491	22.4	45	2.1	217	9.9	1,497	68.9	1,610	74.0	473	21.8	1,475	68.0														
Non-U.S.-Born <sup>7</sup>	4,021	43.5	123	3.1	374	9.3	38	0.9	236	5.9	2,620	65.6	2,820	70.5	832	20.7	3,594	89.6														
Asian	4,667	5.7	85	1.8	217	4.6	54	1.2	333	7.3	3,269	71.6	3,489	76.4	890	19.4	3,476	76.4														
U.S. States / D.C.	354	7.6	41	11.6	82	23.2	0	0.0	18	5.2	248	71.1	263	75.1	65	18.6	267	77.4														
Puerto Rico/U.S. Terr. <sup>6</sup>	4	-- <sup>5</sup>	0	0.0	0	0.0	0	0.0	0	0.0	1	-- <sup>5</sup>	1	-- <sup>5</sup>	2	-- <sup>5</sup>	3	-- <sup>5</sup>														
Non-U.S.-Born <sup>7</sup>	4,309	92.3	44	1.0	135	3.1	54	1.3	315	7.5	3,020	71.7	3,225	76.5	823	19.5	3,206	76.3														
Other <sup>8</sup>	1,536	1.9	63	4.1	215	14.0	23	1.5	137	9.0	975	64.7	1,068	70.5	363	24.0	1,165	77.4														
U.S. States / D.C.	626	40.8	46	7.3	149	23.8	10	1.6	64	10.5	410	67.5	438	71.9	128	21.1	378	62.1														
Puerto Rico/U.S. Terr. <sup>6</sup>	7	0.5	0	0.0	3	-- <sup>5</sup>	1	-- <sup>5</sup>	1	-- <sup>5</sup>	5	71.4	6	85.7	3	-- <sup>5</sup>	4	-- <sup>5</sup>														
Non-U.S.-Born <sup>7</sup>	903	58.8	17	1.9	63	7.0	12	1.3	72	8.0	560	62.6	624	69.4	232	25.8	783	88.0														
Unknown <sup>9</sup>	326	0.4	0	0.0	8	2.5	7	3.1	15	6.6	163	82.3	167	84.3	60	26.0	145	69.4														

NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated. Data on all birth characteristics above except teen births were not provided for approx. 1,140 resident births from Winchester Hospital.

1. In the first category, "Births", percentages of race/Hispanic ethnicity are based on state total of births (including births of unknown race/ethnicity), percentages of mother's birthplace categories are based on subtotals of each race/Hispanic ethnicity category. For all other categories, percentages are based on row totals. 2. Very low birthweight: less than 1,500 grams or 3.3 pounds. 3. Low birthweight: less than 2,500 grams or 5.5 pounds. 4. Mother was breastfeeding or was intending to breastfeed at the time the birth certificate was completed. 5. Calculations based on fewer than five events are excluded. 6. The category "Puerto Rico/U.S. Territories" includes women born in Puerto Rico, the U.S. Virgin Islands, and Guam. Approximately 95% of the births in this category were to women born in Puerto Rico. 7. The category "Non-U.S.-Born" includes women born outside of the 50 U.S. states, District of Columbia, and Puerto Rico/U.S. territories. 8. Other: Mothers who designated themselves as American Indian or Other race. 9. Unknown: Mothers who did not indicate a race/ethnicity.

Table B-2B. Birth Characteristics by Major Maternal Ancestries, Massachusetts: 2000

Maternal Ancestry	Births <sup>1</sup>		Teen Births				Birthweight				Prenatal Care				Caesarean Section				Breast Feeding <sup>4</sup>			
			<18 Years		<20 Years		Very Low <sup>2</sup>		Low <sup>3</sup>		Adequate		1st Trimester		n		n		n		n	
	n	% <sup>5</sup>	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
State Total	81,582	100.0	1,829	2.2	5,395	6.6	1,090	1.4	5,711	7.1	63,109	79.1	66,952	83.8	19,086	23.8	58,188	73.8				
Puerto Rican	4,520	5.5	533	11.8	1,221	27.0	87	1.9	453	10.0	3,022	67.4	3,266	72.7	917	20.5	2,828	63.1				
Dominican	1,632	2.0	83	5.1	230	14.1	13	0.8	101	6.2	1,134	69.7	1,222	75.1	327	20.0	1,371	84.1				
Salvadoran	736	0.9	26	3.5	72	9.8	4	-- <sup>5</sup>	48	6.5	414	56.7	443	60.6	112	15.2	678	92.1				
Other Central American	771	0.9	30	3.9	87	11.3	8	1.0	48	6.2	492	64.5	531	69.4	150	19.5	700	91.1				
Other Hispanic <sup>6</sup>	1,588	1.9	58	3.7	155	9.8	23	1.5	106	6.7	1,091	69.5	1,169	74.3	378	24.0	1,356	86.1				
Chinese	1,293	1.6	4	-- <sup>5</sup>	11	0.9	13	1.0	80	6.3	973	76.5	1,018	80.0	270	21.2	998	78.5				
Vietnamese	825	1.0	13	1.6	35	4.2	10	1.2	44	5.4	577	71.0	620	76.2	141	17.3	453	55.5				
Cambodian	546	0.7	49	9.0	113	20.7	8	1.5	44	8.1	247	45.7	300	55.5	43	7.9	269	49.4				
Asian Indian	861	1.1	0	0.0	0	0.0	9	1.1	80	9.8	623	76.4	666	81.6	200	24.5	782	95.8				
Other Asian/P <sup>7</sup>	1,249	1.5	20	1.6	63	5.0	15	1.2	91	7.4	914	74.6	965	78.6	256	20.9	1,066	86.9				
Cape Verdean	773	0.9	37	4.8	117	15.1	11	1.4	73	9.5	469	61.4	515	67.1	171	22.2	571	74.3				
Brazilian	1,033	1.3	24	2.3	78	7.6	10	1.0	61	5.9	763	74.3	805	78.4	346	33.7	963	93.8				
Other Portuguese	1,313	1.6	32	2.4	115	8.8	7	0.5	87	6.7	1,004	78.1	1,059	82.2	332	25.7	649	50.2				
Haitian	1,026	1.3	7	0.7	28	2.7	36	3.5	119	11.6	640	63.6	702	69.0	297	29.0	859	84.0				
W. Indian /Carib. <sup>8</sup>	652	0.8	14	2.1	43	6.6	20	3.1	73	11.2	451	69.7	486	74.7	155	23.8	549	84.6				
African-American	2,806	3.4	174	6.2	516	18.4	105	3.8	371	13.3	1,826	66.3	1,995	71.8	656	23.5	1,748	62.7				
African <sup>9</sup>	865	1.1	4	-- <sup>5</sup>	21	2.4	16	1.9	67	7.8	566	65.9	599	69.6	230	26.8	776	90.0				
Middle Easterner <sup>10</sup>	876	1.1	3	-- <sup>5</sup>	19	2.2	3	-- <sup>5</sup>	43	5.0	656	76.8	702	82.2	173	20.2	755	88.2				
Native American	254	0.3	18	7.1	45	17.7	2	-- <sup>5</sup>	14	5.6	179	72.2	189	76.2	62	25.0	165	66.5				
European	13,968	17.1	79	0.6	286	2.0	111	0.8	721	5.3	11,131	82.3	11,792	87.0	3,436	25.3	10,986	81.7				

NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated. Data on all birth characteristics above except teen births were not provided for approx. 1,140 resident births from Winchester Hospital.

1. In the first category, "Births," percentages are based on column total (state total of births, including births for which maternal ancestry is unknown). For all other categories, percentages are based on row totals. 2. Very low birthweight: less than 1,500 grams or 3.3 pounds. 3. Low birthweight: less than 2,500 grams or 5.5 pounds. 4. Mother was breastfeeding or was intending to breastfeed at the time the birth certificate was completed. 5. Calculations based on fewer than five events are excluded. 6. Other Hispanic includes Mexican, Cuban, Colombian, and Other South American. 7. Other Asian and Pacific Islander includes Korean, Filipino, Japanese, Laotian, Thai, Pakistani and Hawaiian. 8. West Indian and Caribbean include Jamaican and Barbadian. 9. African includes Nigerian and other African. 10. Middle Easterner includes Lebanese, Iranian, and Israeli.

Figure B-2. Resident Live Births by Mother's Race/Ethnicity: 2000

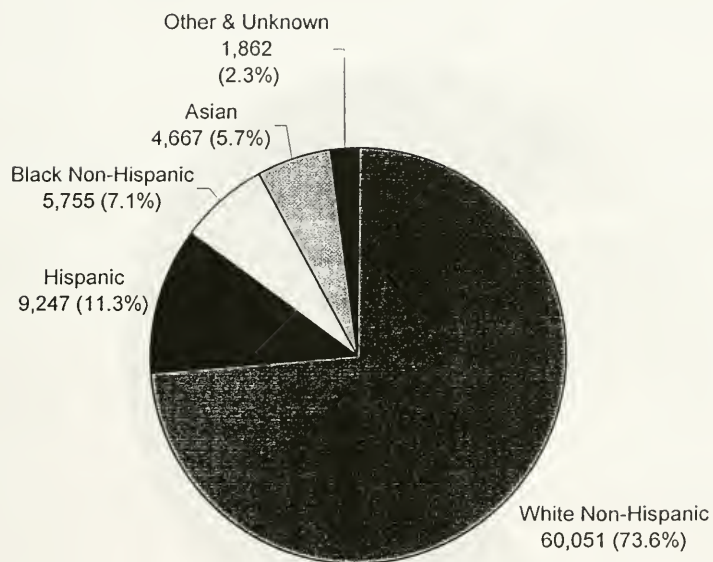


Figure B-3. Resident Live Births by Mother's Age: 2000

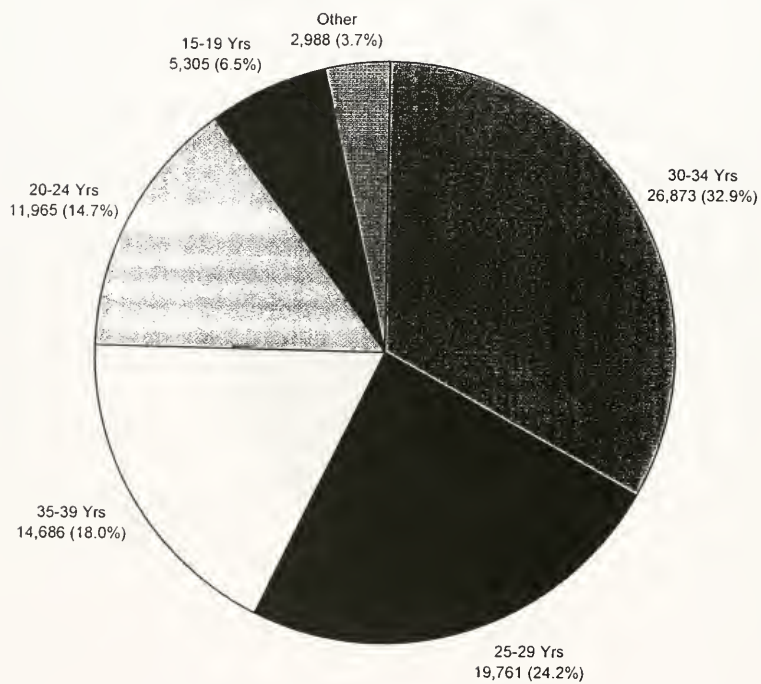


Table B-3A. Resident Birth Characteristics, 30 Largest Municipalities<sup>1</sup>, Massachusetts: 2000

Municipality	Rank	Population	Crude Birth Rate <sup>2</sup>	Mother's Race and Ethnicity				Asian or Other <sup>4</sup>	Very Low Birthweight (<1500 g)		Low Birthweight (<2500 g)
				White, Non-Hispanic % <sup>3</sup>	Black, Non-Hispanic % <sup>3</sup>	Hispanic % <sup>3</sup>	% <sup>3</sup>		%	%	
STATE TOTAL		6,349,097	12.8	73.6	7.1	11.3	7.6		1.4		7.1
Arlington	29	42,389	12.8	85.4	1.8	2.6	9.8		<sup>5</sup>		4.3
Attleboro	30	42,068	14.8	89.0	2.6	4.5	3.7		1.8		7.1
Barnstable	25	47,821	10.1	88.6	2.9	3.1	5.0		2.3		5.3
Boston	1	589,141	13.7	35.1	30.9	21.7	12.0		2.1		9.0
Brookton	6	94,304	16.5	43.7	26.6	11.5	17.8		2.6		9.9
Brookline	17	57,107	10.8	73.8	2.3	3.6	20.0		<sup>5</sup>		6.1
Cambridge	5	101,355	10.7	59.5	13.7	9.3	16.6		2.0		7.1
Chicopee	21	54,653	11.1	79.5	2.6	15.2	2.5		2.0		9.5
Fall River	8	91,938	12.9	84.4	5.7	5.5	4.3		1.3		9.4
Frammingham	14	66,910	14.8	71.6	4.3	13.5	10.5		1.0		6.1
Haverhill	16	58,969	14.4	82.8	1.7	12.5	3.1		1.6		8.1
Lawrence	13	72,043	19.7	20.7	2.0	73.4	3.7		1.8		7.4
Lowell	4	105,167	16.7	48.2	5.3	17.9	28.5		1.5		7.7
Lynn	9	89,050	16.2	44.1	13.7	30.7	11.4		1.7		7.8
Malden	18	56,340	14.6	55.3	10.8	8.3	25.4		1.5		8.6
Medford	20	55,765	10.8	77.2	9.6	4.0	9.1		1.3		8.3
Methuen	28	43,789	13.5	78.0	<sup>5</sup>	16.0	5.2		1.9		8.1
New Bedford	7	93,768	14.0	68.1	5.9	17.0	8.2		1.1		7.2
Newton	11	83,829	10.6	85.0	1.7	3.3	9.9		1.9		8.2
Peabody	24	48,129	11.2	87.2	1.5	6.5	4.8		1.9		6.2
Pittsfield	27	45,793	10.6	83.7	7.4	3.1	5.8		1.0		9.1
Plymouth	23	51,701	13.1	93.5	1.5	1.2	3.0		1.3		5.9
Quincy	10	88,025	13.1	68.7	4.1	2.9	22.9		1.6		7.3
Revere	26	47,283	13.3	62.4	4.3	20.2	13.1		1.1		8.4
Somerville	12	77,478	12.0	60.6	10.3	17.1	11.7		1.2		6.9
Springfield	3	152,082	16.5	32.8	20.9	41.9	4.2		1.9		9.1
Taunton	19	55,976	13.7	86.6	3.9	6.0	2.7		1.2		8.4
Waltham	15	59,226	11.5	63.9	7.3	17.0	11.8		0.7		5.6
Weymouth	22	53,988	14.0	88.1	2.5	1.6	4.1		0.9		6.9
Worcester	2	172,648	14.7	54.2	11.3	23.5	10.6		1.8		8.7

Table B-3A.(cont'd) Resident Birth Characteristics, 30 Largest Municipalities<sup>1</sup>, Massachusetts: 2000

Municipality	Birth			Teen Mothers 15 to 19 years		Deaths		
	Adequate Prenatal Care %	Public Payment for Prenatal Care %	Unmarried %	n	Rate <sup>2</sup>	Infant Mortality Rate <sup>3</sup> 2000	1998-2000	Neonatal Mortality Rate <sup>4</sup> 2000 1998-2000
STATE TOTAL	79.1	27.5	26.5	5,305	25.8	4.6	5.0	3.5
Arlington	86.3	5.7	7.6	6	7.8	0.0	5.0	3.8
Attleboro	78.7	26.9	22.4	47	40.8	0.0	5.0	5.0
Barnstable	80.4	32.6	26.4	29	22.5	5.0	5.0	5.0
Boston	76.7	48.6	44.2	785	35.3	6.7	7.5	4.1
Brockton	63.1	52.6	52.3	218	66.0	6.7	6.6	5.3
Brookline	90.0	5.9	5.2	6	4.3	0.0	5.0	5.0
Cambridge	80.3	17.4	19.2	27	7.2	0.0	5.0	5.0
Chicopee	73.7	43.9	40.5	56	31.0	5.0	3.1	2.2
Fall River	73.7	55.9	49.4	150	51.5	10.1	7.2	6.1
Framingham	89.3	25.5	18.7	45	23.4	5.0	8.4	7.1
Haverhill	79.4	32.2	30.2	68	37.9	5.0	4.4	4.0
Lawrence	68.0	65.9	63.9	278	97.6	7.1	4.2	3.1
Lowell	62.5	48.3	47.1	248	63.4	5.7	6.9	5.6
Lynn	60.3	59.8	50.4	189	63.2	8.3	6.2	5.1
Malden	79.4	27.8	23.1	26	18.7	5.0	5.1	4.2
Medford	84.4	16.3	15.7	11	6.3	5.0	4.3	3.8
Methuen	77.6	23.5	25.2	35	27.7	13.5	7.1	6.5
New Bedford	70.8	59.0	54.3	195	65.5	4.6	5.7	3.1
Newton	85.6	4.7	6.2	8	2.3	11.1	2.3	5.0
Peabody	73.4	21.8	18.7	20	15.4	8.4	5.4	6.0
Pittsfield	61.8	46.9	42.4	58	42.6	5.0	5.0	5.0
Plymouth	79.1	19.0	19.4	23	14.6	5.0	5.4	3.4
Quincy	86.0	20.6	18.3	39	20.0	4.3	3.3	2.7
Revere	71.8	42.8	31.4	35	28.8	0.0	3.7	3.2
Somerville	75.0	31.3	29.0	47	22.5	6.5	4.6	3.9
Springfield	62.0	64.2	63.8	466	77.2	6.0	7.9	5.0
Taunton	75.3	32.6	33.5	62	37.5	5.0	5.9	3.8
Waltham	81.7	21.0	20.5	16	7.1	5.0	5.3	3.9
Weymouth	87.5	13.2	16.5	19	14.3	5.0	4.5	4.1
Worcester	72.2	46.1	44.2	290	41.9	9.9	8.4	7.1

NOTE: All percentages are calculated based on only those births with known values for the characteristics of interest, unless otherwise stated.

Data on birthweight, adequacy of prenatal care, and source of prenatal care payment were not provided for approx. 1,140 resident births from Winchester Hospital.

1. The 30 largest municipalities are the cities and towns in Massachusetts with the largest populations according to DPH 2000 population estimates, based on U.S. Census 2000 population counts. 2. Crude birth rates represent the number of births per 1,000 residents; teen birth rates refer to the number of births per 1,000 females ages 15-19. 2000 birth rates are calculated using the DPH 2000 population estimates. 3. Mothers who designated themselves as Asian, American Indian or Other.

4. For the category of Mother's Race and Ethnicity, percentages are calculated based on the state total of resident births, including births for which mother's race/ethnicity is unknown. 5. Calculations based on fewer than 5 events are excluded. 6. Deaths per 1,000 live births.



Table B-3B. Resident Birth Characteristics, Community Health Network Areas (CHNAs), Massachusetts: 2000

CHNA	Population	Crude Birth Rate <sup>1</sup>	Mother's Race and Ethnicity					Very Low Birthweight (<1500 g) %	Low Birthweight (<2500 g) %
			White, Non-Hispanic % <sup>3</sup>	Black Non-Hispanic % <sup>3</sup>	Hispanic % <sup>3</sup>	Asian or Other <sup>2</sup> % <sup>3</sup>			
STATE TOTAL	6,349,097	12.8	73.6	7.1	11.3	7.6	1.4	7.1	
Community Health Network of Berkshire County	134,953	9.0	90.2	3.8	2.7	3.1	0.7	6.0	
Upper Valley Health Web (Franklin County)	86,889	10.0	93.0	1.5	2.9	2.1	0.9	6.2	
Partnership for Health in Hampshire County (Northampton)	150,077	8.3	87.9	1.4	4.6	5.8	1.4	6.5	
The Community Health Connection (Springfield)	291,665	13.5	54.4	13.8	28.2	3.5	1.5	7.5	
Community Health Network of Southern Worcester County	113,702	12.2	89.1	0.9	7.9	2.0	1.0	7.3	
Community Partners for Health (Milford)	152,117	15.5	95.7	0.6	1.7	1.9	1.2	6.3	
Community Health Network of Greater Metro West (Framingham)	374,478	14.7	86.5	1.6	4.9	6.8	1.1	6.4	
Community Wellness Coalition (Worcester)	289,834	13.6	87.1	7.6	15.9	9.1	1.4	7.6	
Fitchburg/Gardner Community Health Network	250,362	13.1	82.7	2.1	10.8	4.2	1.0	6.5	
Greater Lowell Community Health Network	270,083	14.9	72.0	2.7	8.7	16.4	1.4	6.8	
Greater Lawrence Community Health Network	182,025	15.4	52.9	1.2	41.2	4.5	1.6	6.6	
Greater Haverhill Community Health Network	144,275	12.8	89.7	0.9	6.7	2.6	1.2	7.4	
Community Health Network North (Beverly/Gloucester)	118,280	11.2	94.4	1.2	1.1	3.2	0.6	5.6	
North Shore Community Health Network	278,839	12.9	70.0	6.5	16.7	6.8	1.4	6.7	
Greater Woburn/Concord/Littleton Community Health Network	208,406	12.7	83.5	1.5	2.1	12.4	1.4	6.0	
North Suburban Health Alliance (Medford/Malden/Melrose)	261,844	13.0	77.7	6.0	5.7	10.6	1.4	7.8	
Greater Cambridge/Somerville Community Health Network	278,402	11.6	70.1	8.1	9.2	12.2	1.5	6.6	
West Suburban Health Network (Newton/Waltham)	253,187	11.7	83.7	2.6	5.6	8.1	1.1	6.5	
Alliance for Community Health (Boston/Chelsea/Revere/Winthrop)	746,914	13.6	39.0	25.4	23.3	12.1	1.9	8.7	
Blue Hills Community Health Alliance (Greater Quincy)	365,457	12.9	79.7	5.9	2.3	10.5	1.0	6.2	
Four (For) Communities (Holyoke, Chicopee, Ludlow, Westfield)	159,254	12.0	67.7	2.2	27.2	2.6	1.6	8.3	
Greater Brockton Community Health Network	232,260	14.1	68.7	14.2	6.3	10.0	2.1	8.6	
South Shore Community Partners in Prevention (Plymouth)	180,609	13.5	94.3	0.9	0.9	2.1	0.9	6.0	
Greater Attleboro-Taunton Health & Education Response	242,659	13.9	91.9	2.0	2.8	2.8	1.1	7.4	
Partners for a Healthier Community (Fall River)	140,256	11.3	87.9	4.2	4.2	3.3	1.3	8.6	
Greater New Bedford Health & Human Services Coalition	195,533	11.6	79.5	3.6	10.2	6.1	1.2	6.8	
Cape and Islands Community Health Network	246,737	9.2	89.2	2.3	2.7	4.9	1.5	6.0	

Table B-3B.(cont'd) Resident Birth Characteristics, Community Health Network Areas (CHNAs), Massachusetts: 2000

CHNA	Births				Deaths			
	Adequate Prenatal Care %	Public Payment for Prenatal Care %	Unmarried		Teen Mothers 15 to 19 years n	Infant Mortality Rate <sup>5</sup>		Neonatal Mortality Rate <sup>6</sup> 1998-2000
			%	Rate <sup>4</sup>		2000	1998-2000	
STATE TOTAL	79.1	27.5	26.5	5,305	25.8	4.6	3.5	3.8
Community Health Network of Berkshire County	71.1	38.7	36.2	122	25.8	5.0	3.5	3.8
Upper Valley Health Web (Franklin County)	75.8	36.8	33.6	79	27.6	2.6	0.0	1.3
Partnership for Health in Hampshire County (Northampton)	84.1	21.1	22.3	56	6.2	3.8	0.0	3.0
The Community Health Connection (Springfield)	68.2	48.6	47.7	546	51.9	4.5	5.0	3.4
Community Health Network of Southern Worcester County	77.8	24.7	30.5	109	29.7	6.1	2.3	3.9
Community Partners for Health (Milford)	88.5	9.7	12.5	66	14.6	6.2	5.0	5.2
Community Health Network of Greater Metro West (Framingham)	87.9	11.0	10.3	142	14.3	4.7	3.8	3.3
Community Wellness Coalition (Worcester)	75.3	32.8	32.8	332	32.1	3.8	3.3	2.9
Fitchburg/Gardner Community Health Network	78.8	24.0	27.1	259	31.6	7.6	5.1	6.0
Greater Lowell Community Health Network	72.2	26.1	26.8	312	36.4	4.0	2.8	2.8
Greater Lawrence Community Health Network	73.6	40.2	39.0	319	51.0	5.2	3.7	4.0
Greater Haverhill Community Health Network	81.5	20.2	20.7	109	25.9	5.5	6.1	4.6
Community Health Network North (Beverly/Gloucester)	84.8	15.6	15.1	53	14.2	3.7	2.7	3.1
North Shore Community Health Network	68.9	34.7	30.7	257	31.0	3.5	5.0	2.8
Greater Woburn/Concord/Littleton Community Health Network	85.7	5.8	6.7	30	7.5	6.1	5.6	4.5
North Suburban Health Alliance (Medford/Malden/Melrose)	83.7	18.3	15.8	76	11.0	4.5	3.0	2.3
Greater Cambridge/Somerville Community Health Network	81.4	17.2	17.5	87	11.0	2.9	2.6	3.6
West Suburban Health Network (Newton/Waltham)	85.9	7.4	8.2	29	3.0	4.7	3.7	3.0
Alliance for Community Health	76.1	46.1	41.3	922	34.9	3.4	2.0	2.2
(Boston/Chelsea/Revere/Winthrop)						5.8	4.4	4.7
Blue Hills Community Health Alliance (Greater Quincy)	87.9	12.4	13.5	112	11.6	2.8	2.5	3.2
Four (For) Communities (Holyoke, Chicopee, Ludlow, Westfield)	74.1	46.2	43.6	230	39.1	4.2	3.1	4.2
Greater Brockton Community Health Network	74.0	31.0	33.2	270	32.7	5.8	4.9	5.1
South Shore Community Partners in Prevention (Plymouth)	86.0	12.3	14.9	83	14.7	4.5	2.9	4.0
Greater Attleboro-Taunton Health & Education Response	80.5	21.1	20.5	182	23.9	2.1	1.5	3.6
Partners for a Healthier Community (Fall River)	77.0	47.8	41.2	170	38.3	9.4	8.1	6.8
Greater New Bedford Health & Human Services Coalition	76.4	43.4	41.4	246	37.7	4.9	3.5	2.8
Cape and Islands Community Health Network	81.8	27.7	22.2	107	17.4	6.2	5.9	4.4

NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated.  
Data on birthweight, adequacy of prenatal care, and source of prenatal care payment were not provided for approx. 1,140 resident births from Winchester Hospital.

1. Births per 1,000 residents (male and female). 2000 birth rates are calculated using OPH 2000 population estimates, based on U.S. Census 2000 population counts (see Technical Notes in Appendix). 2. Mothers who designated themselves as Asian, American Indian or Other. 3. For the category of Mother's Race and Ethnicity, percentages are calculated based on the state total of resident births, including births for which mother's race/Hispanic ethnicity is unknown. 4. Births per 1,000 female residents ages 15-19. 5. Calculations based on fewer than 5 events are excluded. 6. Deaths per 1,000 live births.



**Table B-4. Age-Specific and Crude Birth Rates, Massachusetts: 1990 and 2000**

Mother's Age	1990		2000		Percent Change in Rate
	Births <sup>1</sup>	Rate	Births	Rate <sup>2</sup>	
12-14	124	1.3	90	0.7	-46.2
15-19	7,258	35.1	5,305	25.8	-27.9
20-24	18,115	69.5	11,965	58.2	-17.4
25-29	29,913	107.2	19,761	89.6	-16.7
30-34	25,687	93.9	26,873	107.3	16.5
35-39	9,795	40.1	14,686	53.6	33.7
40-44	1,522	6.9	2,748	10.3	49.3
45+	46	0.3 <sup>3</sup>	150	0.6	87.5
Birth rate, ages 15-44 <sup>4</sup>	92,290	62.2	81,338	57.2	-8.0
Crude Birth Rate <sup>5</sup>	92,461	15.4	81,582	12.8	-16.6

NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated.

1. Differences in the number of births from previous publications are the result of updating of the birth files. The number of births for all age groups does not always add to the total number of births as mother's age is sometimes not recorded on the birth certificate. 2. 2000 birth rates are calculated using DPH 2000 population estimates, based on U.S. Census 2000 population counts. 3. Denominator is female population ages 45-49. 4. Rate represents the total number of births to women age 15-44 per 1,000 women age 15 to 44. 5. Births per 1,000 residents (females and males). Includes births to mothers of all age groups and mothers for whom age is unknown.

Figure B-4. Trends in the Number of Births by Mother's Age Group,  
Massachusetts: 1980-2000

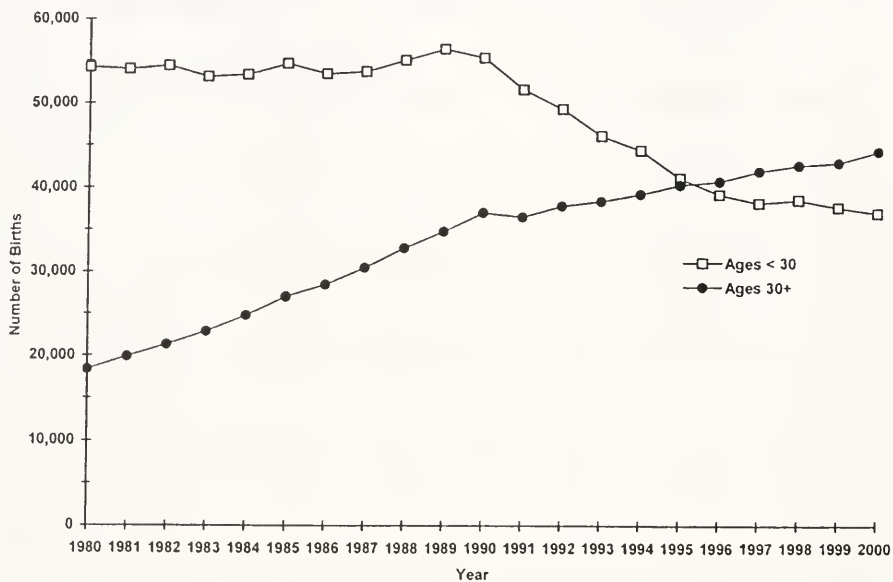
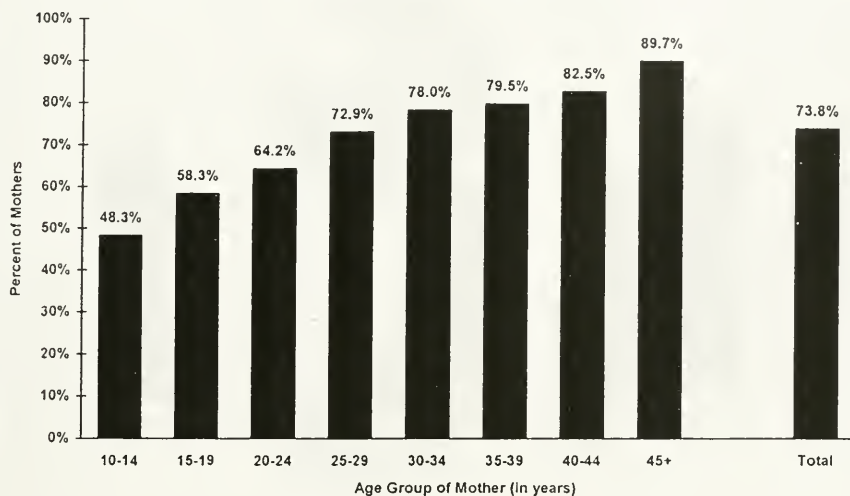


Figure B-5. Percent of Mothers Breastfeeding or Intending to Breastfeed<sup>1</sup> by Age Group, Massachusetts<sup>2</sup>: 2000

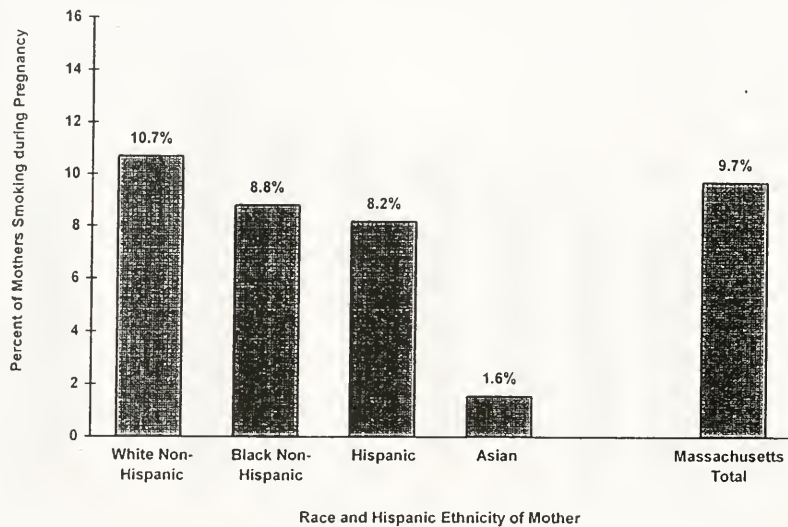


NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated. Data on breastfeeding were not provided for approx. 1,140 resident births from Winchester Hospital.

1. Information about breastfeeding was reported by the mother at the time the birth certificate was completed.

2. For race-specific breastfeeding rates, see Table 2B.

Figure B-6. Smoking Prevalence<sup>1</sup> during Pregnancy by Race and Hispanic Ethnicity of Mother, Massachusetts: 2000

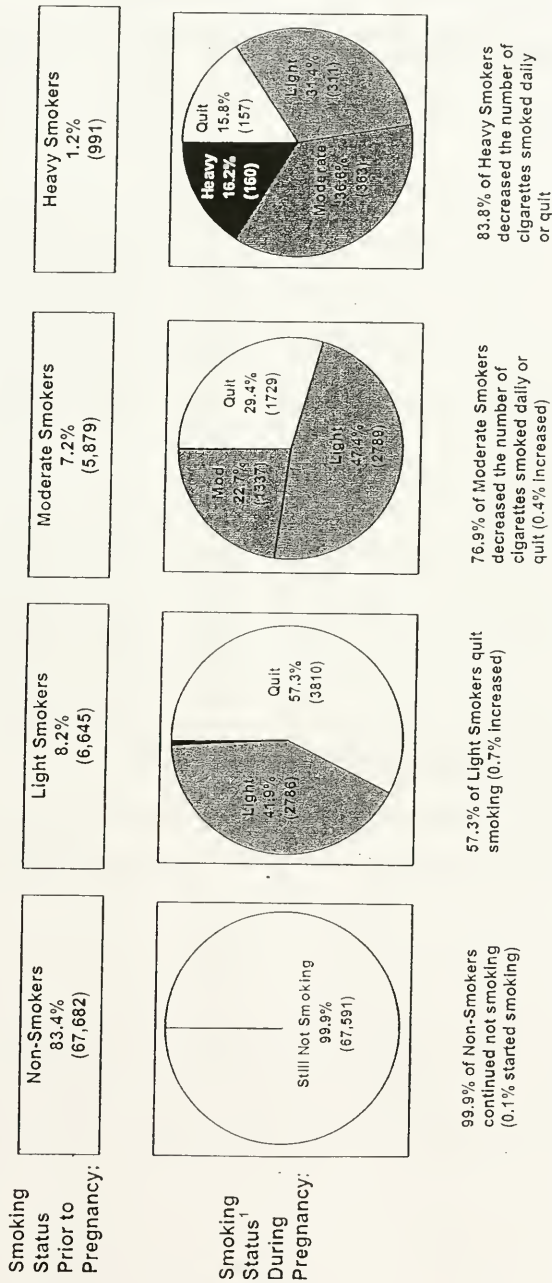


NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated.

1. Based on information provided on the birth certificate by mother. Mothers with more than one delivery are counted for each birth.

NOTE: Maternal smoking is self-reported, usually following childbirth; these data should be interpreted cautiously.

**Figure B-7. The Distribution of Smoking Status during Pregnancy by Smoking Status Prior to Pregnancy, Massachusetts: 2000**



NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated. Not all percentages add up to 100 due to a small number of mothers with unknown smoking status.

1. Light Smokers=1-10 cigarettes daily; Moderate Smokers=11-20 cigarettes daily; Heavy Smokers=21 cigarettes or more daily.

Table B-5A. Parity<sup>1</sup> by Age of Mother, Massachusetts: 2000

Age of Mother (years)		Total Births	1st	2nd	3rd	4th	5th+
STATE TOTAL	n <sup>2</sup>	81,582	35,452	27,025	11,917	3,842	1,984
	% <sup>3</sup>	100.0	44.2	33.7	14.9	4.8	2.5
10-14	n	90	87	3	0	0	0
	%	100.0	96.7	3.3	0.0	0.0	0.0
15-19	n	5,305	4,381	742	120	24	1
	%	100.0	83.2	14.1	2.3	0.5	0.0
20-24	n	11,965	6,401	3,759	1,229	362	101
	%	100.0	54.0	31.7	10.4	3.1	0.9
25-29	n	19,761	9,357	6,280	2,601	780	395
	%	100.0	48.2	32.3	13.4	4.0	2.0
30-34	n	26,873	10,305	9,888	4,248	1,245	627
	%	100.0	39.2	37.6	16.1	4.7	2.4
35-39	n	14,686	4,094	5,384	3,174	1,171	610
	%	100.0	28.4	37.3	22.0	8.1	4.2
40-44	n	2,748	778	919	523	249	229
	%	100.0	28.8	34.1	19.4	9.2	8.5
45+	n	150	47	50	22	11	20
	%	100.0	31.3	33.3	14.7	7.3	13.3

NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated.  
Data on parity were not provided for approx. 1,140 resident births from Winchester Hospital.

1. The number of live births including this birth. 2. State totals include births of unknown parity and unknown mother's age. 3. Percents may not sum to 100.0 due to rounding.

Table B-5B. Number and Percent Distribution of Births<sup>1</sup> by Plurality and Age, Massachusetts: 1990-2000

		Singletons		Multiples						Total births	
Age Group	Year	n	%	Twins		Triplets or more		Total Multiples		n	%
				n <sup>2</sup>	%	n <sup>2</sup>	%	n <sup>2</sup>	%		
All Ages											
	1990	90,049	97.4	2,312	2.5	99	0.1	2,411	2.6	92,460	100.0
	1991	85,802	97.3	2,285	2.6	89	0.1	2,374	2.7	88,176	100.0
	1992	84,722	97.2	2,347	2.7	133	0.2	2,480	2.8	87,202	100.0
	1993	82,055	97.0	2,367	2.8	205	0.2	2,572	3.0	84,627	100.0
	1994	81,187	96.9	2,357	2.8	214	0.3	2,571	3.1	83,758	100.0
	1995	78,935	96.8	2,429	3.0	198	0.2	2,627	3.2	81,562	100.0
	1996	77,355	96.5	2,621	3.3	194	0.2	2,815	3.5	80,164	100.0
	1997	77,203	96.1	2,856	3.6	262	0.3	3,118	3.9	80,321	100.0
	1998	78,004	95.8	3,114	3.8	288	0.4	3,402	4.2	81,406	100.0
	1999	77,473	95.8	3,147	3.9	246	0.3	3,393	4.2	80,866	100.0
	2000	78,075	95.7	3,263	4.0	244	0.3	3,507	4.3	81,582	100.0
Ages <35											
	1990	79,081	97.5	1,946	2.4	70	0.1	2,016	2.5	81,097	100.0
	1991	74,810	97.5	1,863	2.4	76	0.1	1,939	2.5	76,749	100.0
	1992	73,043	97.3	1,914	2.6	103	0.1	2,017	2.7	75,060	100.0
	1993	70,042	97.2	1,849	2.6	158	0.2	2,007	2.8	72,049	100.0
	1994	68,644	97.2	1,844	2.6	164	0.2	2,008	2.8	70,652	100.0
	1995	65,669	97.2	1,787	2.6	141	0.2	1,928	2.9	67,597	100.0
	1996	63,560	96.9	1,935	2.9	126	0.2	2,061	3.1	65,621	100.0
	1997	62,598	96.7	1,949	3.0	170	0.3	2,119	3.3	64,717	100.0
	1998	62,719	96.4	2,193	3.4	170	0.3	2,363	3.6	65,082	100.0
	1999	61,816	96.4	2,147	3.3	150	0.2	2,297	3.6	64,113	100.0
	2000	61,659	96.4	2,205	3.4	130	0.2	2,335	3.6	63,994	100.0
Ages 35+											
	1990	10,968	96.5	366	3.2	29	0.3	395	3.5	11,363	100.0
	1991	10,987	96.2	422	3.7	13	0.1	435	3.8	11,422	100.0
	1992	11,675	96.2	433	3.6	30	0.3	463	3.8	12,138	100.0
	1993	12,007	95.5	518	4.1	47	0.4	565	4.5	12,572	100.0
	1994	12,543	95.7	513	3.9	50	0.4	563	4.3	13,106	100.0
	1995	13,264	95.0	642	4.6	57	0.4	699	5.0	13,963	100.0
	1996	13,793	94.8	686	4.7	68	0.5	754	5.2	14,547	100.0
	1997	14,602	93.6	907	5.8	92	0.6	999	6.4	15,601	100.0
	1998	15,282	93.6	921	5.6	118	0.7	1,039	6.4	16,321	100.0
	1999	15,657	93.5	1,000	6.0	96	0.6	1,096	6.5	16,753	100.0
	2000	16,412	93.3	1,058	6.0	114	0.6	1,172	6.7	17,584	100.0

NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated.

1 Differences in the number of births from previous publications are the result of updating of files. 2. Numbers of multiples represent individual infants rather than sets of infants

**Table B-6. Resident Births By Mother's Age, Marital Status, and Race/Ethnicity  
Massachusetts: 2000**

Age of Mother	Marital Status	Total	White Non-Hisp.	Black Non-Hisp.	Hispanic	Asian	Other	Unknown
<b>Grand Total</b>		81,546	60,031	5,755	9,247	4,667	1,536	310
<b>Total Married</b>		59,926	49,014	2,454	3,481	3,925	798	254
<b>Total Unmarried</b>		21,620	11,017	3,301	5,766	742	738	56
<19	<b>Total</b>	3,373	1,463	442	1,182	144	139	3
	<b>Married</b>	190	68	10	88	13	11	0
	<b>Unmarried</b>	3,183	1,395	432	1,094	131	128	3
19	<b>Total</b>	2,021	1,037	248	583	73	76	4
	<b>Married</b>	280	153	8	90	17	11	1
	<b>Unmarried</b>	1,741	884	240	493	56	65	3
20-24	<b>Total</b>	11,953	6,786	1,313	2,883	529	415	27
	<b>Married</b>	4,419	2,879	288	741	350	151	10
	<b>Unmarried</b>	7,534	3,907	1,025	2,142	179	264	17
25-29	<b>Total</b>	19,751	14,065	1,462	2,319	1,448	375	82
	<b>Married</b>	15,153	11,770	701	1,126	1,264	225	67
	<b>Unmarried</b>	4,598	2,295	761	1,193	184	150	15
30-34	<b>Total</b>	26,868	21,988	1,346	1,513	1,567	334	120
	<b>Married</b>	24,075	20,508	816	947	1,446	248	110
	<b>Unmarried</b>	2,793	1,480	530	566	121	86	10
35-39	<b>Total</b>	14,682	12,313	745	640	753	172	59
	<b>Married</b>	13,281	11,491	494	417	698	129	52
	<b>Unmarried</b>	1,401	822	251	223	55	43	7
40-44	<b>Total</b>	2,898	2,379	199	127	153	25	15
	<b>Married</b>	2,528	2,145	137	72	137	23	14
	<b>Unmarried</b>	370	234	62	55	16	2	1

Table does not include 36 births to mothers of unknown marital status or age.



Table B-7. Resident Births to Teenage Mothers: 1970-2000

Year	Total Births	Age of Mother							Total <19	% of Total Births
		<14	14	15	16	17	18	19		
1970	93,582	11	70	320	802	1,726	3,043	4,285	10,257	11.0%
1971	86,755	26	84	313	875	1,738	2,981	4,000	10,017	11.5%
1972	76,835	21	103	348	955	1,841	2,834	3,690	9,792	12.7%
1973	72,237	12	93	393	959	1,759	2,584	3,282	9,082	12.6%
1974	70,071	18	79	333	895	1,762	2,524	3,181	8,792	12.5%
1975	68,070	20	84	325	915	1,678	2,560	3,085	8,667	12.7%
1976	65,947	19	96	336	807	1,478	2,332	2,923	7,991	12.1%
1977	67,838	19	68	270	792	1,477	2,293	2,913	7,832	11.5%
1978	68,526	18	67	303	737	1,445	2,252	2,979	7,801	11.4%
1979	70,568	11	70	283	773	1,413	2,306	2,916	7,772	11.0%
1980	72,591	15	56	300	740	1,360	2,202	3,092	7,765	10.7%
1981	73,931	13	82	275	722	1,357	2,164	2,816	7,429	10.0%
1982	75,749	15	83	299	753	1,328	2,161	2,722	7,361	9.7%
1983	76,031	8	78	255	726	1,278	2,053	2,521	6,919	9.1%
1984	78,198	9	75	265	714	1,307	2,061	2,585	7,016	9.0%
1985	81,766	16	97	295	698	1,283	1,986	2,595	6,970	8.5%
1986	82,163	15	82	334	712	1,233	1,954	2,521	6,851	8.3%
1987	84,343	17	79	327	796	1,337	1,965	2,498	7,019	8.3%
1988	88,047	27	120	352	732	1,450	2,068	2,511	7,260	8.2%
1989	91,314	19	108	345	853	1,426	2,207	2,776	7,734	8.5%
1990	92,461	21	103	351	810	1,344	2,014	2,739	7,382	8.0%
1991	88,176	20	102	372	758	1,391	1,910	2,461	7,014	7.9%
1992	87,202	17	103	341	782	1,327	1,753	2,352	6,675	7.6%
1993	84,627	16	121	360	741	1,259	1,872	2,237	6,606	7.8%
1994	83,758	24	131	371	822	1,244	1,758	2,217	6,567	7.8%
1995	81,562	19	98	356	721	1,203	1,648	2,062	6,107	7.5%
1996	80,164	11	80	342	687	1,115	1,666	1,948	5,849	7.3%
1997	80,321	19	84	290	694	1,121	1,613	2,083	5,904	7.3%
1998	81,406	14	65	271	663	1,120	1,710	2,059	5,902	7.3%
1999	80,866	10	63	244	570	1,039	1,679	1,983	5,588	6.9%
2000	81,582	12	78	211	502	1,026	1,544	2,022	5,395	6.6%

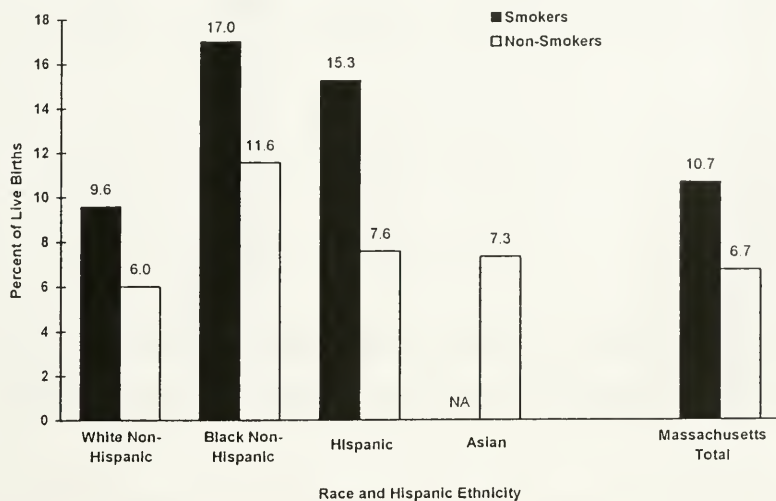
Table B-8. Births by Birthweight, Race and Hispanic Ethnicity, Massachusetts: 2000

Birthweight (in grams)	Total			White, non- Hispanic			Black, non- Hispanic			Hispanic			Asian			Other			Unknown		
	n	% <sup>1</sup>		n	% <sup>1</sup>		n	% <sup>1</sup>		n	% <sup>1</sup>		n	% <sup>1</sup>		n	% <sup>1</sup>		n	% <sup>1</sup>	
State Total	81,582	100.0		60,051	100.0		5,755	100.0		9,247	100.0		4,667	100.0		1,536	100.0		326		
<500	118	0.1		60	0.1		33	0.6		14	0.2		5	0.1		3	-- <sup>2</sup>		3		
500-999	423	0.5		252	0.4		85	1.5		55	0.6		20	0.4		9	0.6		2		
1000-1499	549	0.7		363	0.6		78	1.4		66	0.7		29	0.6		11	0.7		2		
1500-1999	1,165	1.4		796	1.3		135	2.3		146	1.6		53	1.1		33	2.1		2		
2000-2499	3,456	4.2		2,309	3.8		359	6.2		475	5.1		226	4.8		81	5.3		6		
2500-2999	11,776	14.4		7,697	12.8		1,129	19.6		1,644	17.8		1,016	21.8		262	17.1		28		
3000-3499	28,433	34.9		20,130	33.5		2,114	36.7		3,621	39.2		1,923	41.2		572	37.2		73		
3500-3999	24,818	30.4		19,456	32.4		1,368	23.8		2,442	26.4		1,051	22.5		420	27.3		81		
4000-4499	7,953	9.7		6,603	11.0		350	6.1		639	6.9		226	4.8		107	7.0		28		
4500-4999	1,395	1.7		1,165	1.9		74	1.3		110	1.2		22	0.5		21	1.4		3		
>=5000	152	0.2		124	0.2		8	0.1		13	0.1		6	0.1		1	-- <sup>2</sup>		0		
Unknown	1,344	1.6		1,096	1.8		22	0.4		22	0.2		90	1.9		16	1.0		98		
VLBW <sup>3</sup> (0-1499 g)	1,090	1.4		675	1.1		196	3.4		135	1.5		54	1.2		23	1.5		7		
LBW <sup>4</sup> (0-2499 g)	5,711	7.1		3,780	6.4		690	12.0		756	8.2		333	7.3		137	9.0		15		

NOTE: Percentages for detailed birthweight rows ("<500" through "Unknown") are calculated based on all births including those with unknown birthweight. Percentages for VLBW and LBW rows are calculated based on births with known birthweights only. Data on birthweight were not provided for approx. 1,140 resident births occurring at Winchester Hospital.

1. Percentages are based on column totals. 2. Calculations based on fewer than five events are excluded. 3. VLBW: Very Low Birthweight. 4. LBW: Low Birthweight.

Figure B-8. Low Birthweight<sup>1</sup> among Smoking and Non-Smoking<sup>2</sup> Mothers by Race and Hispanic Ethnicity, Massachusetts: 2000



NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated. Maternal smoking is self-reported, usually following childbirth; these data should be interpreted cautiously. Data on birthweight were not provided for approx. 1,140 resident births occurring at Winchester Hospital.

1 Low birthweight: less than 2,500 grams or 5 5 pounds

2. Based on information provided on the birth certificate by the mother.

**Table B-9. Low Birthweight<sup>1</sup> by Maternal Age, Race and Hispanic Ethnicity, Massachusetts: 2000**

Mother's Age (in years)	Total LBW		White, non-		Black, non-		Hispanic		Asian		Other		Unknown
	Infants n	% <sup>3</sup>	Hispanic n	% <sup>3</sup>	Hispanic n	% <sup>3</sup>	Hispanic n	% <sup>3</sup>	n	% <sup>3</sup>	n	% <sup>3</sup>	
State Total <sup>2</sup>	5,711	7.1	3,780	6.4	690	12.0	756	8.2	333	7.3	137	9.0	15
<18	181	9.9	60	8.5	33	13.9	76	10.4	8	9.4	4	-- <sup>4</sup>	0
18-19	316	8.9	130	7.4	54	11.9	97	9.4	14	10.7	20	13.2	1
20-24	870	7.3	427	6.4	133	10.2	238	8.3	41	7.8	30	7.3	1
25-29	1,295	6.7	815	5.9	174	11.9	175	7.6	96	6.8	32	8.6	3
30-34	1,656	6.3	1,265	5.9	159	11.9	107	7.1	96	6.2	22	6.6	7
35-39	1,120	7.8	875	7.2	106	14.3	50	7.9	60	8.1	26	15.5	3
40+	273	9.6	208	8.9	31	15.7	13	10.2	18	12.0	3	-- <sup>4</sup>	0

NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated. Data on birthweight were not provided for approx. 1,140 resident births occurring at Winchester Hospital.

1. Low Birthweight, less than 2,500 grams or 5.5 pounds at birth. 2. State totals include women of unknown age. 3. Percentages are based upon the number of low birthweight infants divided by the total births in each age and race/ethnicity category. 4. Calculations based on fewer than five events are excluded.

Table B-10. Births by Gestational Age<sup>1</sup>, Race and Hispanic Ethnicity, Massachusetts: 2000

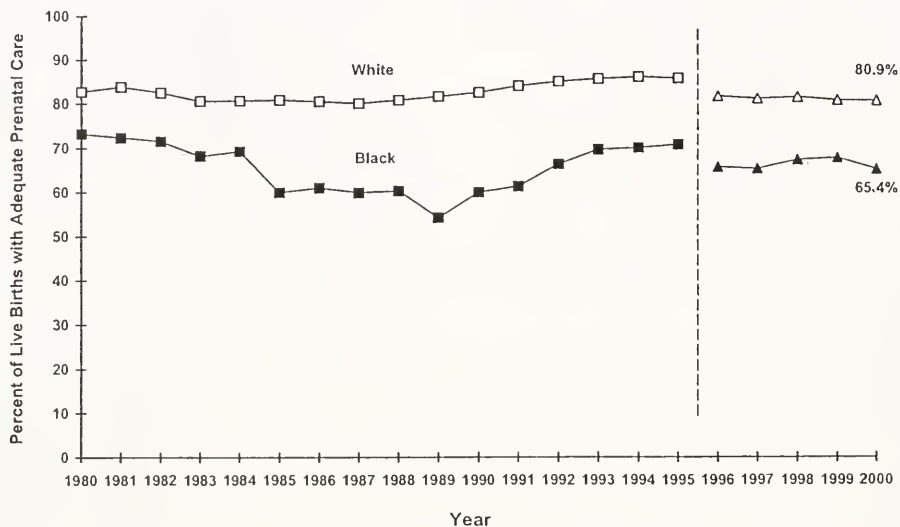
Gestational Age (weeks completed)	Total		White, Non-Hispanic		Black, Non-Hispanic		Hispanic		Asian		Other <sup>2</sup>		Unknown	
	n	% <sup>2</sup>	n	% <sup>2</sup>	n	% <sup>2</sup>	n	% <sup>2</sup>	n	% <sup>2</sup>	n	% <sup>2</sup>	n	% <sup>2</sup>
State Total	81,582	100.0	60,051	100.0	5,755	100.0	9,247	100.0	4,667	100.0	1,536	100.0	326	
<20	17	0.0	5	0.0	5	0.1	2	-- <sup>7</sup>	3	-- <sup>7</sup>	1	-- <sup>7</sup>	1	-- <sup>7</sup>
20-23	142	0.2	81	0.1	37	0.6	17	0.2	3	-- <sup>7</sup>	2	-- <sup>7</sup>	2	-- <sup>7</sup>
24-27	342	0.4	189	0.3	71	1.2	51	0.6	20	0.4	9	0.6	2	-- <sup>7</sup>
28-31	722	0.9	499	0.8	96	1.7	89	1.0	20	0.4	15	1.0	3	-- <sup>7</sup>
32-35	2,980	3.7	2,111	3.5	316	5.5	361	3.9	141	3.0	46	3.0	5	-- <sup>7</sup>
36	2,379	2.9	1,704	2.8	201	3.5	270	2.9	149	3.2	48	3.1	7	-- <sup>7</sup>
37-39 <sup>4</sup>	32,925	40.4	23,823	39.7	2,505	43.5	3,842	41.5	2,038	43.7	630	41.0	87	-- <sup>7</sup>
40	28,228	34.6	21,135	35.2	1,676	29.1	3,189	34.5	1,621	34.7	509	33.1	98	-- <sup>7</sup>
41	10,298	12.6	7,795	13.0	684	11.9	1,093	11.8	515	11.0	193	12.6	18	-- <sup>7</sup>
42	1,483	1.8	1,071	1.8	115	2.0	210	2.3	54	1.2	31	2.0	2	-- <sup>7</sup>
43	53	0.1	36	0.1	6	0.1	7	0.1	2	-- <sup>7</sup>	1	-- <sup>7</sup>	1	-- <sup>7</sup>
44+	43	0.1	33	0.1	1	-- <sup>7</sup>	5	0.1	3	-- <sup>7</sup>	1	-- <sup>7</sup>	0	-- <sup>7</sup>
Unknown <sup>5</sup>	1,970	2.4	1,569	2.6	42	0.7	111	1.2	98	2.1	50	3.3	100	-- <sup>7</sup>
Very early gestation, <28 weeks	501	0.6	275	0.5	113	2.0	70	0.8	26	0.6	12	0.8	5	-- <sup>7</sup>
Preterm, <37 weeks <sup>6</sup>	6,582	8.3	4,589	7.8	726	12.7	790	8.6	336	7.4	121	8.1	20	-- <sup>7</sup>

NOTE. Percentages for detailed gestational age category rows ("<20" through "Unknown") are calculated based on all births including those with unknown gestational age. Percentages for "Very early gestation" and "Preterm" rows are calculated based on births with known gestational age only.

Data on gestational age were not provided for approx. 1,140 resident births occurring at Winchester Hospital.

1. A clinical estimate of the number of weeks of pregnancy completed; as estimated by the attendant at birth or the postnatal physician. 2. Percentages are based on column total. 3. Other races include American Indian and others not specified. 4. Normal gestational age is defined as 37-42 weeks. 5. Estimate of gestational age not provided. 6. Also known as early gestational age, premature delivery, or preterm delivery. 7. Calculations based on fewer than five events are excluded.

Figure B-9. Trends in Adequacy of Prenatal Care<sup>1,2</sup> by Race<sup>3</sup>, Massachusetts: 1980-2000



1. Due to changes beginning in 1996 in the collection of information on Adequacy of Prenatal Care, caution should be used when comparing these data over time. 2. All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated. Data on adequacy of prenatal care were not provided for approx. 1,140 resident births occurring at Winchester Hospital. 3. On tables and graphs which include data prior to June 1986, the race classifications do not include ethnicity; most Hispanics are included in the race category of Whites.

**Table B-11. Low Birthweight by Adequacy of Prenatal Care, Race and Hispanic Ethnicity, Massachusetts: 2000**

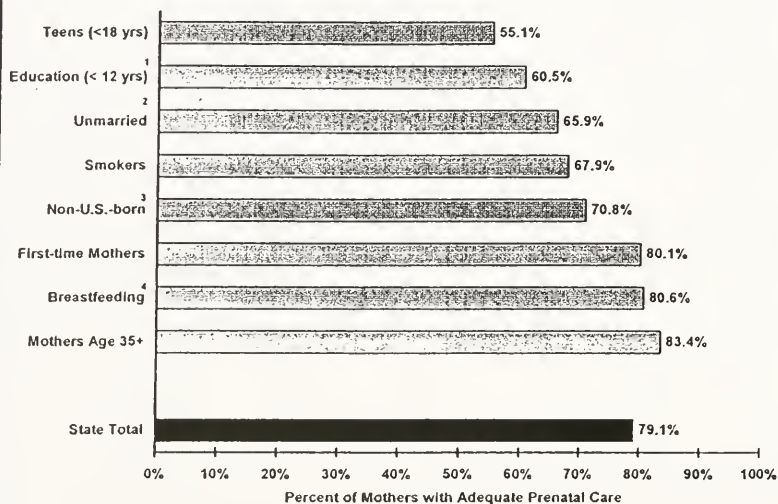
Race, Ethnicity, and Birthweight		Total <sup>1</sup>	Adequacy of Prenatal Care <sup>2</sup>		
			Adequate	Intermediate	Late/None
STATE TOTAL	Total Births	79,813	63,109	13,855	2,849
	# LBW <sup>3</sup>	5,634	4,205	1,169	260
	% LBW	7.0	6.7	8.4	9.1
White non-Hispanic	Total Births	58,696	48,820	8,499	1,377
	# LBW <sup>3</sup>	3,731	2,943	679	109
	% LBW	6.4	6.0	8.0	7.9
Black non-Hispanic	Total Births	5,670	3,729	1,444	497
	# LBW <sup>3</sup>	679	447	173	59
	% LBW	12.0	12.0	12.0	11.9
Hispanic	Total Births	9,178	6,153	2,400	625
	# LBW <sup>3</sup>	749	490	191	68
	% LBW	8.2	8.0	8.0	10.9
Asian	Total Births	4,563	3,269	1,074	220
	# LBW <sup>3</sup>	327	233	79	15
	% LBW	7.2	7.1	7.4	6.8
Other	Total Births	1,508	975	411	122
	# LBW <sup>3</sup>	134	81	46	7
	% LBW	8.9	8.3	11.2	5.7
Unknown	Total Births	198	163	27	8
	# LBW <sup>3</sup>	14	11	1	2

NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated.

Data on adequacy of prenatal care were not provided for approx. 1,140 resident births occurring at Winchester Hospital.

1. All data are based on the 79,813 births with known Adequacy of Prenatal Care data. 2. A detailed explanation of the levels of prenatal care is presented in the Section Definitions. 3. Low birthweight: less than 2,500 grams or 5.5 pounds.

Figure B-10. Adequacy of Prenatal Care for Selected Population Characteristics, Massachusetts: 2000

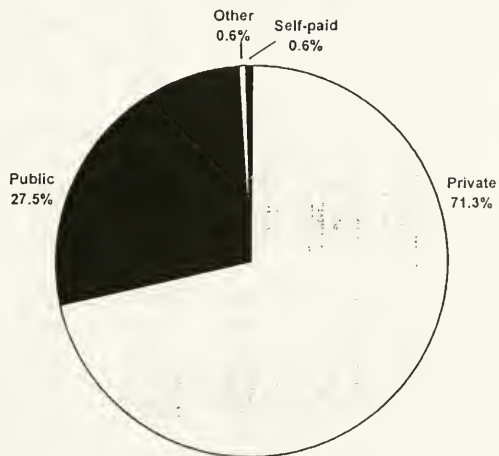


NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated. Data on adequacy of prenatal care and breastfeeding were not provided for approx. 1,140 resident births from Winchester Hospital.

1. Women 20 years of age and older. 2. Marital status at time of birth. 3. Non-U.S.-born includes women born outside of the 50 U.S. states, District of Columbia, and U.S. territories (Puerto Rico, U.S. Virgin Islands, Guam). 4. Mother was or was intending to breastfeed at the time the birth certificate was completed.



Figure B-11. Distribution of Prenatal Care Payment Source<sup>1</sup>,  
Massachusetts: 2000



NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated.  
Data on source of prenatal care payment were not provided for approx. 1,140 resident births occurring at Winchester Hospital.

<sup>1</sup> Private: Commercial indemnity plan, commercial managed care (HMO, PPO, IPP, IPA, and other), or other private insurance.  
Public: Government programs including Commonhealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care. Other: Worker's Compensation and other sources

**Table B-12. Birth Characteristics by Source of Prenatal Care Payment, Race and Hispanic Ethnicity, Massachusetts: 2000**

Race, Ethnicity, and Payment Source	Births <sup>1</sup>		Teen Births				Birthweight			
			<18 Years		<20 Years		Very Low <sup>2</sup>		Low <sup>3</sup>	
	n	%	n	%	n	%	n	%	n	%
<b>STATE TOTAL<sup>4</sup></b>	81,582	100.0	1,829	2.2	5,395	6.6	1,090	1.4	5,711	7.1
Public	21,715	27.5	1,319	6.1	3,955	18.2	337	1.6	1,860	8.6
Medicaid <sup>5</sup>	19,141	24.2	1,248	6.5	3,736	19.5	302	1.6	1,680	8.8
Other Public <sup>6</sup>	2,574	3.3	71	2.8	219	8.5	35	1.4	180	7.0
Private <sup>7</sup>	56,305	71.3	467	0.8	1,297	2.3	676	1.2	3,575	6.3
<b>White, Non-Hispanic</b>	60,051	100.0	714	1.2	2,500	4.2	675	1.1	3,780	6.3
Public	9,876	17.1	400	4.1	1,545	15.6	117	1.2	749	7.6
Medicaid <sup>5</sup>	8,927	15.5	380	4.3	1,473	16.5	109	1.2	698	7.8
Other Public <sup>6</sup>	949	1.6	20	2.1	72	7.6	8	0.8	51	5.4
Private <sup>7</sup>	47,271	81.9	294	0.6	865	1.8	500	1.1	2,812	5.9
<b>Black, Non-Hispanic</b>	5,755	100.0	237	4.1	690	12.0	196	3.4	690	12.0
Public	3,262	57.0	190	5.8	567	17.4	99	3.0	402	12.3
Medicaid <sup>5</sup>	2,823	49.4	176	6.2	535	19.0	85	3.0	351	12.4
Other Public <sup>6</sup>	439	7.7	14	3.2	32	7.3	14	3.2	51	11.6
Private <sup>7</sup>	2,355	41.2	43	1.8	114	4.8	89	3.8	265	11.3
<b>Hispanic</b>	9,247	100.0	730	7.9	1,765	19.1	135	1.5	756	8.2
Public	6,455	70.0	617	9.6	1,515	23.5	96	1.5	548	8.5
Medicaid <sup>5</sup>	5,526	60.0	587	10.6	1,415	25.6	85	1.5	488	8.8
Other Public <sup>6</sup>	929	10.1	30	3.2	100	10.8	11	1.2	60	6.5
Private <sup>7</sup>	2,615	28.4	97	3.7	221	8.5	33	1.3	192	7.3
<b>Asian</b>	4,667	100.0	85	1.8	217	4.6	54	1.2	333	7.1
Public	1,210	26.6	68	5.6	165	13.6	10	0.8	79	6.5
Medicaid <sup>5</sup>	1,121	24.6	65	5.8	158	14.1	10	0.9	74	6.6
Other Public <sup>6</sup>	89	2.0	3	-- <sup>8</sup>	7	7.9	0	0.0	5	5.6
Private <sup>7</sup>	3,287	72.2	15	0.5	47	1.4	43	1.3	244	7.4
<b>Other<sup>9</sup></b>	1,536	100.0	63	4.1	215	14.0	23	1.5	137	8.9
Public	894	59.2	44	4.9	162	18.1	14	1.6	81	9.1
Medicaid <sup>5</sup>	737	48.8	40	5.4	154	20.9	13	1.8	69	9.4
Other Public <sup>6</sup>	157	10.4	4	-- <sup>8</sup>	8	5.1	1	-- <sup>8</sup>	12	7.6
Private <sup>7</sup>	588	39.0	18	3.1	49	8.3	9	1.5	54	9.2

**Table B-12 (cont'd). Birth Characteristics by Source of Prenatal Care Payment, Race, and Hispanic Ethnicity, Massachusetts: 2000**

Race, Ethnicity, and Payment Source	Prenatal Care				Cesarean Section		Breastfeeding <sup>10</sup>	
	Adequate n	%	Began 1st Trimester n	%	n	%	n	%
<b>STATE TOTAL<sup>4</sup></b>	63,109	79.1	66,952	83.8	19,086	23.8	58,188	73.8
Public	13,849	64.3	15,020	69.5	4,314	19.9	13,655	63.1
Medicaid <sup>5</sup>	12,348	64.9	13,376	70.2	3,750	19.7	11,512	60.3
Other Public <sup>6</sup>	1,501	59.3	1,644	64.4	564	21.9	2,143	83.3
Private <sup>7</sup>	47,611	84.9	50,184	89.5	14,275	25.4	43,848	78.0
<b>Non-Hispanic White</b>	48,820	83.2	51,551	87.8	14,474	24.6	42,287	73.3
Public	6,760	68.8	7,239	73.6	1,998	20.3	5,411	54.9
Medicaid <sup>5</sup>	6,084	68.5	6,516	73.3	1,765	19.8	4,688	52.6
Other Public <sup>6</sup>	676	71.8	723	76.7	233	24.6	723	76.3
Private <sup>7</sup>	40,620	86.3	42,792	90.8	12,053	25.6	36,429	77.2
<b>Non-Hispanic Black</b>	3,729	65.8	4,046	70.9	1,415	24.7	4,182	73.3
Public	1,795	56.1	2,031	62.8	718	22.1	2,193	67.5
Medicaid <sup>5</sup>	1,623	58.3	1,817	64.8	617	21.9	1,829	65.0
Other Public <sup>6</sup>	172	41.5	214	50.0	101	23.0	364	83.1
Private <sup>7</sup>	1,874	79.8	1,952	83.1	678	28.9	1,918	81.5
<b>Hispanic</b>	6,153	67.0	6,631	72.1	1,884	20.5	6,933	75.4
Public	4,087	63.6	4,425	68.8	1,211	18.8	4,685	72.8
Medicaid <sup>5</sup>	3,574	65.0	3,870	70.2	1,044	19.0	3,846	69.9
Other Public <sup>6</sup>	513	55.3	555	59.9	167	18.0	839	90.3
Private <sup>7</sup>	1,995	76.7	2,127	81.7	645	24.7	2,147	82.4
<b>Asian</b>	3,269	71.6	3,489	76.4	890	19.4	3,476	76.4
Public	665	55.4	723	60.1	170	14.0	687	56.8
Medicaid <sup>5</sup>	611	54.9	666	59.8	150	13.4	614	54.8
Other Public <sup>6</sup>	54	62.1	57	64.0	20	22.5	73	82.0
Private <sup>7</sup>	2,549	77.7	2,707	82.5	706	21.5	2,745	83.6
<b>Other<sup>9</sup></b>	975	64.7	1,068	70.5	363	24.0	1,165	77.4
Public	531	59.9	590	66.2	211	23.7	669	74.9
Medicaid <sup>5</sup>	453	61.8	503	68.5	171	23.3	530	72.0
Other Public <sup>6</sup>	78	51.0	87	55.4	40	25.5	139	88.5
Private <sup>7</sup>	430	73.6	461	78.8	148	25.4	475	81.2

NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated.

Data on all indicators except for teen births were not provided for approx. 1,140 resident births occurring at Winchester Hospital.

1. In the "Births" category, percentages are based on Race/Ethnicity totals (group column). For all other categories, percentages are based on Birth totals (row total) excluding unknowns for each characteristic. 2. Very Low Birthweight: less than 1,500 grams or 3.3 pounds. 3. Low Birthweight: less than 2,500 grams or 5.5 pounds. 4. Total births does not equal Public + Private. Other categories of prenatal care payment are also included in Total: Workers' Compensation, self-paid, and other. 5. Medicaid/MassHealth. 6. Other Public: Commonwealth, Healthy Start, Medicare, other government programs, and free care. 7. Private: commercial indemnity plans or commercial managed care org (HMO, PPO, IPP, or IPA). 8. Calculations based on fewer than five events are excluded. 9. Other: Mothers who designated their race as American Indian or Other. 10. Mother was intending to breastfeed at the time the birth certificate was completed.

Table B-13. Birth Characteristics by Licensed Maternity Facility<sup>1</sup>, Massachusetts: 2000

Facility	Location	Occurrence Births <sup>2</sup> (n)	Low Birthweight (%)	Public Payment for Delivery <sup>3</sup> (%)	Adequate Prenatal Care (%)
STATE TOTAL <sup>4</sup>		82,673	7.1	26.9	79.0
Anna Jaques Hospital	Newburyport	899	4.0	15.9	83.4
Baystate Medical Center	Springfield	4,923	10.3	43.1	70.6
Berkshire Medical Center	Pittsfield	775	5.8	36.0	64.1
Beth Israel Deaconess Medical Center	Boston	4,876	12.0	16.5	77.4
Beverly Hospital	Beverly	2,508	4.7	26.8	82.5
Boston Medical Center	Boston	1,794	11.0	87.3	45.2
Brigham and Womens Hospital	Boston	10,042	10.3	17.6	96.9
Brockton Hospital	Brockton	1,661	6.7	48.1	65.4
Cambridge Birth Center	Cambridge	73	0.0	33.3	60.3
Cambridge Hospital	Cambridge	759	2.0	46.0	59.1
Cape Cod Hospital	Barnstable	977	3.6	30.5	85.4
Caritas Good Samaritan Medical Center	Brockton	759	5.4	33.3	62.6
Caritas Norwood Hospital	Norwood	628	2.9	13.9	89.0
Charlton Memorial Hospital	Fall River	1,651	6.9	40.3	78.5
Cooley Dickinson Hospital	Northampton	899	2.4	20.2	87.7
Deaconess-Waltham Hospital	Waltham	301	3.0	25.6	83.7
Emerson Hospital	Concord	1,510	3.4	3.7	84.4
Fairview Hospital	Great Barrington	156	-- <sup>5</sup>	34.8	81.8
Falmouth Hospital	Falmouth	651	3.6	27.9	76.6
Franklin Medical Center	Greenfield	498	4.2	41.4	79.7
Hale Hospital	Haverhill	313	5.4	55.6	72.5
Harrington Memorial Hospital	Southbridge	443	2.7	39.8	81.9
Heywood Hospital	Gardner	561	2.3	36.1	63.0
Holy Family Hospital and Medical Center	Methuen	1,371	4.7	20.6	70.5
Holyoke Hospital	Holyoke	396	4.3	45.7	75.6
Jordan Hospital	Plymouth	783	3.6	24.5	69.8
Lawrence General Hospital	Lawrence	1,400	5.1	56.9	73.5
Leominster Hospital	Leominster	1,403	3.6	32.3	79.4
Lowell General Hospital	Lowell	2,144	5.1	33.2	65.6
Martha's Vineyard Hospital	Oak Bluffs	107	-- <sup>5</sup>	45.8	83.2

**Table B-13. (cont'd) Births Characteristics by Licensed Maternity Facility<sup>1</sup>, Massachusetts: 2000**

Facility	Location	Occurrence Births <sup>2</sup> (n)	Low Birthweight (%)	Public Payment for Delivery <sup>3</sup> (%)	Adequate Prenatal Care (%)
Mary Lane Hospital	Ware	196	4.1	40.3	71.8
Massachusetts General Hospital	Boston	3,228	8.7	34.6	68.0
Melrose-Wakefield Hospital	Melrose	2,048	4.7	15.4	88.1
Mercy Hospital	Springfield	977	3.4	50.7	70.8
Metrowest Medical Center-Framingham Union Campus	Framingham	2,468	5.3	17.6	93.0
Milford-Whitinsville Regional Hospital	Milford	774	2.7	15.4	88.1
Morton Hospital	Taunton	637	4.2	38.7	74.1
Mount Auburn Hospital	Cambridge	1,313	3.8	15.6	84.9
Nantucket Cottage Hospital	Nantucket	96	-- <sup>5</sup>	25.0	73.4
New England Medical Center Hospital	Boston	1,587	21.2	33.8	76.5
Newton Wellesley Hospital	Newton	3,321	4.2	1.3	84.1
North Adams Regional Hospital	North Adams	318	3.5	44.7	84.0
North Shore Birth Center	Beverly	78	0.0	11.5	84.4
North Shore Medical Center - Salem Hospital	Salem	1,701	3.4	32.2	53.1
Saint Vincent Hospital	Worcester	1,841	4.4	19.5	80.4
Saints Memorial Medical Ctr.-St. John's Campus	Lowell	682	3.7	32.0	68.2
South Shore Hospital	Weymouth	3,883	4.3	6.2	91.2
St. Elizabeth's Medical Center of Boston	Boston	1,791	10.7	18.2	85.7
St. Luke's Hospital	New Bedford	1,557	6.0	49.7	75.1
Sturdy Memorial Hospital	Attleboro	1,209	2.9	19.7	79.1
The Birthplace At Wellesley	Wellesley	88	0.0	0.0	75.3
Tobey Hospital	Wareham	487	3.3	33.0	73.5
Umass Memorial Medical Center-West Campus	Worcester	4,360	11.1	30.9	73.7
Winchester Hospital <sup>6</sup>	Winchester	2,477	4.6	5.9	84.6
All Other Hospitals		10	-- <sup>5</sup>	25.0	50.0
Home Births, Enroute, Other		285	11.1	28.7	52.2

NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated. Boston Regional Medical Center closed to births on February 6, 1999. Also in 1999 there was a name change: Caritas Good Samaritan Medical Center from Good Samaritan Medical Center. In October of 2000, Deaconess-Waltham Hospital closed. 1. A licensed maternity facility is a medical unit licensed by the Commonwealth for the care of women during pregnancy and childbirth. 2. See Section Definition for explanation of occurrence births. 3. Public payment for delivery includes Medicaid/Masshealth, Commonwealth, Medicare, Healthy Start, other government programs, and free care. 4. The percentages provided in this row are based on occurrence births and may differ from data presented elsewhere in this book which are based on resident births. 5. Calculations based on values of 1-4 for medical characteristics of facilities with less than 200 births are suppressed based Guidelines for Release of Births Data, Bureau of Health Statistics, Research and Evaluation, Massachusetts Department of Public Health. 6. Data on birth characteristics in this table were not provided for approx. 1,180 occurrence births from Winchester Hospital.

**Table B-13A. Caesarean Section Deliveries and Vaginal Births after Cesarean Section (VBACs) by Licensed Maternity Facility<sup>1</sup>, All Births, Massachusetts: 2000**

Facility	Occurrence Births <sup>2</sup>	Total C-Sections		Primary C-Section <sup>2</sup>		Repeat C-Section <sup>2</sup>		VBACs <sup>2</sup>	
		n	% <sup>3,4</sup>	n	% <sup>3,5</sup>	n	% <sup>3,6</sup>	n	% <sup>7</sup>
STATE TOTAL	82,673	19,390	23.9	12,865	17.8	6,525	75.3	2,139	24.7
Anna Jaques Hospital	899	200	22.2	127	15.7	73	83.0	15	17.0
Baystate Medical Center	4,923	1,060	22.1	678	16.0	382	69.0	172	31.0
Berkshire Medical Center	775	149	19.2	87	12.6	62	75.6	20	24.4
Beth Israel Deaconess Medical Center	4,876	1,395	28.6	954	22.4	441	71.7	174	28.3
Beverly Hospital	2,508	502	20.0	317	14.2	185	67.8	88	32.2
Boston Medical Center	1,794	443	24.7	306	19.0	137	74.9	46	25.1
Brigham and Women's Hospital	10,042	2,514	25.1	1,759	19.7	755	69.6	330	30.4
Brockton Hospital	1,661	342	20.6	237	15.6	105	75.0	35	25.0
Cambridge Hospital	759	196	25.8	123	18.4	73	79.3	19	20.7
Cape Cod Hospital	977	215	22.0	128	15.3	87	61.7	54	38.3
Caritas Good Samaritan Medical Center	759	190	25.0	112	17.0	78	76.5	24	23.5
Caritas Norwood Hospital	628	155	24.7	108	18.9	47	81.0	11	19.0
Charlton Memorial Hospital	1,651	353	21.4	224	15.0	129	81.1	30	18.9
Cooley Dickinson Hospital	899	187	20.8	128	15.8	59	64.8	32	35.2
Deaconess-Waltham Hospital	301	60	19.9	38	13.9	22	78.6 <sup>B</sup>	6	21.4 <sup>B</sup>
Emerson Hospital	1,510	370	24.5	224	17.0	146	76.0	46	24.0
Fairview Hospital	156	37	23.7	23	17.0	14	66.7 <sup>B</sup>	7	33.3 <sup>B</sup>
Falmouth Hospital	651	144	23.5	90	16.6	54	76.1	17	23.9
Franklin Medical Center	498	101	20.3	68	15.2	33	66.0	17	34.0
Hale Hospital	313	70	22.4	48	16.8	22	81.5 <sup>B</sup>	5	18.5 <sup>B</sup>
Harrington Memorial Hospital	443	101	22.8	55	14.3	46	79.3	12	20.7
Heywood Hospital	561	86	15.3	56	11.0	30	56.6	23	43.4
Holy Family Hospital and Medical Center	1,371	369	26.9	275	21.9	94	83.2	19	16.8
Holyoke Hospital	396	97	24.6	63	17.9	34	81.0	8	19.0
Jordan Hospital	783	206	26.4	132	19.4	74	73.3	27	26.7
Lawrence General Hospital	1,400	259	18.5	147	11.7	112	81.2	26	18.8
Leominster Hospital	1,403	311	22.2	175	14.3	136	79.5	35	20.5
Lowell General Hospital	2,144	431	20.1	282	14.5	149	76.0	47	24.0
Martha's Vineyard Hospital	107	25	23.4	16	16.7	9	81.8 <sup>B</sup>	2	-- <sup>9</sup>
Mary Lane Hospital	196	46	23.5	27	16.4	19	61.3	12	38.7

**Table B-13A (cont'd). Caesarean Section Deliveries and Vaginal Births After Cesarean Section (VBACs) by Licensed Maternity Facility<sup>1</sup>, All Births, Massachusetts: 2000**

Facility	Occurrence Births <sup>2</sup>	Total C-Sections		Primary C-Section <sup>2</sup>		Repeat C-Section <sup>2</sup>		VBACs <sup>2</sup>	
		n	% <sup>3,4</sup>	n	% <sup>3,5</sup>	n	% <sup>3,6</sup>	n	% <sup>7</sup>
Massachusetts General Hospital	3,228	706	21.9	518	17.2	188	88.3	25	11.7
Melrose-Wakefield Hospital	2,048	571	27.9	369	20.7	202	75.4	66	24.6
Mercy Hospital	977	195	20.0	123	13.9	72	77.4	21	22.6
Metrowest Medical Center-Framingham Union Campus	2,468	561	22.7	368	16.4	193	85.0	34	15.0
Milford-Whitinsville Regional Hospital	774	183	23.6	135	19.3	48	65.8	25	34.2
Morton Hospital	637	174	27.9	90	17.6	84	75.0	28	25.0
Mount Auburn Hospital	1,313	302	23.0	212	17.9	90	70.9	37	29.1
Nantucket Cottage Hospital	96	31	32.3	24	27.0	7	100.0	0	0.0
New England Medical Center Hospital	1,587	406	25.6	295	20.5	111	75.0	37	25.0
Newton Wellesley Hospital	3,321	885	26.7	605	20.3	280	83.3	56	16.7
North Adams Regional Hospital	318	69	21.7	37	13.7	32	68.1	15	31.9
North Shore Medical Center - Salem Hospital	1,701	393	23.1	238	15.5	155	91.2	15	8.8
Saint Vincent Hospital	1,841	332	18.1	241	14.3	91	58.7	64	41.3
Saints Memorial Medical Ctr.-St. John's Campus	682	158	23.2	109	17.5	49	83.1	10	16.9
South Shore Hospital	3,883	1,088	28.0	772	21.9	316	89.8	36	10.2
St. Elizabeth's Medical Center of Boston	1,791	538	30.1	352	22.8	186	75.0	62	25.0
St. Luke's Hospital	1,557	385	24.9	247	18.1	138	77.5	40	22.5
Sturdy Memorial Hospital	1,209	348	28.8	200	19.6	148	78.3	41	21.7
Tobey Hospital	487	75	17.1	45	11.4	30	71.4	12	28.6
UMass Memorial Medical Center-West Campus	4,360	1,070	24.5	689	17.9	381	75.4	124	24.6
Winchester Hospital	2,477	305	23.6	188	16.3	117	81.3	27	18.8

NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated. Deaconess-Waltham Hospital closed to births on October 1, 2000. Data on method of delivery were not provided for approx. 1,180 occurrence births from Winchester Hospital.

1. A licensed maternity facility is a medical unit licensed by the Commonwealth for the care of women during pregnancy and childbirth. 2. See Section Definitions for explanation of occurrence births, primary and repeat Cesarean sections, and VBACs. The percentages provided in this table are based on occurrence births and may differ from data presented elsewhere in this book which are based on resident births. 3. The percentage of Cesarean births reported is not adjusted for risk factors such as mother's age, birthweight, or complications of labor and delivery, which would influence the number of procedures in a particular facility. Caution should be used when comparing unadjusted percentages. 4. Percentage of total Cesarean sections= (total Cesarean births/all births) x 100. 5. Percentage primary cesarean sections=(primary Cesarean sections/all births-repeat Cesarean sections-VBACs) x 100. 6. Percentage repeat Cesarean sections= (repeat Cesarean sections/(repeat Cesarean sections + VBACs)) x 100. 7. Percentage VBACs= (VBAC deliveries/(repeat Cesarean sections + VBAC)) x 100. 8. This percentage is based on less than 40 total births and should be interpreted with caution. 9. Calculations based on fewer than five events are excluded.



**Table B-14A. Birth Characteristics: Occurrence and Resident Births and Infant Deaths,  
Massachusetts Municipalities: 2000**

Community	Occurrence Births	Resident Births	Low Birthweight	Teen Births, < 20 years	Infant Deaths	Neonatal Deaths
STATE TOTAL	82,673	81,582	5,711	5,395	377	288
Abington	1	214	18	9	4	4
Acton	2	247	10	1	1	1
Acushnet	0	102	6	9	1	0
Adams	1	93	-- <sup>1</sup>	9	0	0
Agawam	0	285	13	9	2	1
Alford	1	3	0	0	0	0
Amesbury	0	194	14	12	0	0
Amherst	3	161	10	6	2	1
Andover	0	338	10	2	0	0
Aquinnah (Gay Head)	1	5	0	0	0	0
Arlington	3	541	22	6	0	0
Ashburnham	0	49	-- <sup>1</sup>	1	0	0
Ashby	0	34	-- <sup>1</sup>	2	0	0
Ashfield	1	21	0	1	0	0
Ashland	1	244	24	5	3	2
Athol	0	132	-- <sup>1</sup>	19	1	0
Attleboro	1,210	621	44	47	1	1
Auburn	1	176	10	6	0	0
Avon	0	46	-- <sup>1</sup>	3	0	0
Ayer	1	136	11	8	3	2
Barnstable	978	481	25	30	4	3
Barre	0	68	-- <sup>1</sup>	2	0	0
Becket	0	16	-- <sup>1</sup>	2	0	0
Bedford	0	168	14	0	1	1
Belchertown	2	171	11	5	0	0
Bellingham	2	220	7	7	1	1
Belmont	1	278	19	1	3	3
Berkley	0	75	-- <sup>1</sup>	1	0	0
Berlin	0	31	-- <sup>1</sup>	0	0	0
Bernardston	0	16	0	1	0	0
Beverly	2,586	520	25	22	2	1
Billerica	3	514	23	18	4	4
Blackstone	0	104	-- <sup>1</sup>	5	0	0
Blandford	0	8	0	1	0	0
Bolton	0	69	0	0	0	0
Boston	23,363	8,079	727	805	54	43
Bourne	0	247	13	9	3	3
Boxborough	0	61	-- <sup>1</sup>	0	0	0
Boxford	0	73	-- <sup>1</sup>	0	0	0
Boylston	0	41	-- <sup>1</sup>	0	0	0
Braintree	1	417	22	10	0	0



**Table B-14A. Birth Characteristics: Occurrence and Resident Births and Infant Deaths,  
Massachusetts Municipalities: 2000**

Community	Occurrence Births	Resident Births	Low Birthweight	Teen Births, < 20 years	Infant Deaths	Neonatal Deaths
Brewster	0	52	-- <sup>1</sup>	1	1	1
Bridgewater	1	299	17	11	3	3
Brimfield	0	38	5	4	0	0
Brockton	2,426	1,559	154	219	9	6
Brookfield	0	25	5	4	0	0
Brookline	1	614	37	6	0	0
Buckland	0	14	0	1	0	0
Burlington	2	297	10	1	2	1
Cambridge	2,157	1,085	76	27	4	3
Canton	1	265	15	2	0	0
Carlisle	1	47	-- <sup>1</sup>	0	0	0
Carver	0	123	6	8	1	1
Charlemont	0	15	0	1	0	0
Charlton	0	156	12	3	0	0
Chatham	0	38	-- <sup>1</sup>	0	0	0
Chelmsford	2	443	31	12	3	2
Chelsea	1	682	54	91	3	2
Cheshire	0	39	-- <sup>1</sup>	2	0	0
Chester	0	12	0	1	0	0
Chesterfield	0	15	-- <sup>1</sup>	1	0	0
Chicopee	0	605	57	59	2	1
Chilmark	0	2	0	0	0	0
Clarksburg	0	9	0	0	0	0
Clinton	3	173	15	14	0	0
Cohasset	1	87	-- <sup>1</sup>	1	0	0
Colrain	1	12	-- <sup>1</sup>	0	0	0
Concord	1,512	176	10	2	2	2
Conway	1	11	0	0	0	0
Cummington	0	4	-- <sup>1</sup>	0	0	0
Dalton	0	57	-- <sup>1</sup>	5	1	0
Danvers	0	235	13	6	3	2
Dartmouth	0	264	22	18	0	0
Dedham	0	301	21	3	2	2
Deerfield	1	43	-- <sup>1</sup>	0	0	0
Dennis	1	115	8	9	0	0
Dighton	0	65	-- <sup>1</sup>	1	0	0
Douglas	0	126	5	4	0	0
Dover	0	58	-- <sup>1</sup>	0	0	0
Dracut	1	375	16	16	0	0
Dudley	0	128	14	8	1	0
Dunstable	0	45	0	1	0	0
Duxbury	0	189	13	4	0	0
East Bridgewater	0	155	17	2	2	2
East Brookfield	0	21	-- <sup>1</sup>	1	0	0
East Longmeadow	0	154	7	6	0	0

**Table B-14A. Birth Characteristics: Occurrence and Resident Births and Infant Deaths,  
Massachusetts Municipalities: 2000**

Community	Occurrence Births	Resident Births	Low Birthweight	Teen Births, < 20 years	Infant Deaths	Neonatal Deaths
Eastham	0	39	-- <sup>1</sup>	1	1	0
Easthampton	1	169	16	12	0	0
Easton	0	266	12	3	0	0
Edgartown	0	40	-- <sup>1</sup>	1	0	0
Egremont	0	6	0	0	0	0
Erving	0	18	-- <sup>1</sup>	0	0	0
Essex	0	36	-- <sup>1</sup>	1	0	0
Everett	0	495	30	20	3	3
Fairhaven	0	130	8	3	1	1
Fall River	1,654	1,187	112	154	12	10
Falmouth	653	286	20	20	0	0
Fitchburg	5	566	41	94	3	2
Florida	0	6	-- <sup>1</sup>	1	0	0
Foxborough	1	230	15	3	3	3
Frammingham	2,471	991	60	45	5	4
Franklin	3	523	34	3	2	2
Freetown	0	85	-- <sup>1</sup>	0	0	0
Gardner	561	224	10	31	2	2
Georgetown	0	103	-- <sup>1</sup>	3	1	0
Gill	0	11	0	0	0	0
Gloucester	1	335	20	26	0	0
Goshen	0	6	0	0	0	0
Gosnold	0	1	0	0	0	0
Grafton	1	212	10	5	0	0
Granby	0	56	-- <sup>1</sup>	3	0	0
Granville	0	19	0	0	0	0
Great Barrington	160	51	-- <sup>1</sup>	2	0	0
Greenfield	498	204	19	22	0	0
Groton	1	156	18	0	0	0
Groveland	0	68	7	2	0	0
Hadley	2	45	5	1	2	2
Halifax	0	93	6	3	0	0
Hamilton	0	102	6	1	0	0
Hampden	0	39	-- <sup>1</sup>	1	0	0
Hancock	0	6	0	1	0	0
Hanover	0	156	8	2	1	0
Hanson	1	128	7	9	0	0
Hardwick	0	23	-- <sup>1</sup>	0	0	0
Harvard	0	44	-- <sup>1</sup>	0	0	0
Harwich	0	102	-- <sup>1</sup>	3	0	0
Hatfield	0	18	0	0	0	0
Haverhill	314	848	68	68	4	4
Hawley	0	2	0	0	0	0
Heath	0	10	-- <sup>1</sup>	1	0	0
Hingham	0	291	12	2	0	0

**Table B-14A. Birth Characteristics: Occurrence and Resident Births and Infant Deaths,  
Massachusetts Municipalities: 2000**

Community	Occurrence Births	Resident Births	Low Birthweight	Teen Births, < 20 years	Infant Deaths	Neonatal Deaths
Hinsdale	0	10	0	1	0	0
Holbrook	0	139	11	1	0	0
Holden	0	167	16	4	0	0
Holland	0	23	0	2	0	0
Holliston	0	199	15	1	1	0
Holyoke	398	663	62	138	2	2
Hopedale	0	84	-- <sup>1</sup>	1	0	0
Hopkinton	1	227	13	2	1	1
Hubbardston	0	59	5	1	0	0
Hudson	1	250	21	9	0	0
Hull	0	107	9	3	0	0
Huntington	0	22	0	0	0	0
Ipswich	1	121	12	4	0	0
Kingston	0	178	9	3	1	1
Lakeville	0	130	9	11	0	0
Lancaster	2	73	-- <sup>1</sup>	3	2	1
Lanesborough	0	32	-- <sup>1</sup>	0	0	0
Lawrence	1,400	1,416	104	284	10	8
Lee	0	45	-- <sup>1</sup>	2	0	0
Leicester	0	117	5	8	1	1
Lenox	2	40	-- <sup>1</sup>	1	0	0
Leominster	1,403	589	35	64	1	1
Leverett	1	10	0	1	0	0
Lexington	0	303	15	3	0	0
Leyden	0	2	0	0	0	0
Lincoln	0	106	14	0	0	0
Littleton	0	135	6	1	0	0
Longmeadow	0	139	6	1	0	0
Lowell	2,830	1,761	134	251	10	9
Ludlow	0	169	11	10	0	0
Lunenburg	1	111	5	3	0	0
Lynn	2	1,446	112	194	12	9
Lynnfield	0	126	7	0	1	1
Malden	0	823	67	26	1	1
Manchester-by-the-Sea	0	45	-- <sup>1</sup>	0	0	0
Mansfield	1	414	28	6	1	0
Marblehead	0	240	8	0	2	2
Marion	0	43	-- <sup>1</sup>	0	3	3
Marlborough	4	617	43	36	2	2
Marshfield	0	357	21	7	1	0
Mashpee	1	152	17	4	1	0
Mattapoisett	0	61	6	1	0	0
Maynard	0	174	16	4	1	1
Medfield	1	151	10	1	0	0
Medford	3	605	46	11	2	2

**Table B-14A. Birth Characteristics: Occurrence and Resident Births and Infant Deaths,  
Massachusetts Municipalities: 2000**

Community	Occurrence Births	Resident Births	Low Birthweight	Teen Births, < 20 years	Infant Deaths	Neonatal Deaths
Medway	0	211	19	3	2	2
Melrose	2,049	383	25	6	0	0
Mendon	0	61	5	1	0	0
Merrimac	0	78	8	0	0	0
Methuen	1,372	592	47	35	8	8
Middleborough	0	251	13	14	0	0
Middlefield	0	3	0	0	0	0
Middleton	0	81	5	3	0	0
Milford	776	375	25	20	3	2
Millbury	0	142	12	9	1	0
Millis	1	118	6	3	0	0
Millville	0	39	-- <sup>1</sup>	0	0	0
Milton	0	312	12	5	0	0
Monroe	0	1	-- <sup>1</sup>	1	0	0
Monson	0	98	-- <sup>1</sup>	10	0	0
Montague	5	96	7	11	0	0
Monterey	0	9	-- <sup>1</sup>	2	0	0
Montgomery	0	12	-- <sup>1</sup>	1	0	0
Mount Washington	0	2	0	0	0	0
Nahant	0	33	0	0	0	0
Nantucket	102	141	10	6	1	1
Natick	1	503	29	5	0	0
Needham	2	401	18	0	1	0
New Ashford	0	5	0	0	0	0
New Bedford	1,559	1,311	93	198	6	4
New Braintree	0	6	-- <sup>1</sup>	0	0	0
New Marlborough	0	17	0	1	0	0
New Salem	0	12	-- <sup>1</sup>	0	0	0
Newbury	0	61	-- <sup>1</sup>	1	0	0
Newburyport	900	203	12	9	0	0
Newton	3,321	886	73	8	4	3
Norfolk	1	129	9	0	0	0
North Adams	319	141	7	31	0	0
North Andover	0	370	15	1	1	1
North Attleboro	2	413	31	11	1	1
North Brookfield	0	51	-- <sup>1</sup>	2	0	0
North Reading	0	202	17	1	1	1
Northampton	904	235	14	12	0	0
Northborough	0	175	10	3	0	0
Northbridge	0	197	12	14	0	0
Northfield	0	26	-- <sup>1</sup>	0	0	0
Norton	0	275	23	16	0	0
Norwell	0	120	-- <sup>1</sup>	2	0	0
Norwood	631	347	21	10	1	1
Oak Bluffs	108	26	-- <sup>1</sup>	1	0	0

**Table B-14A. Birth Characteristics: Occurrence and Resident Births and Infant Deaths,  
Massachusetts Municipalities: 2000**

Community	Occurrence Births	Resident Births	Low Birthweight	Teen Births, < 20 years	Infant Deaths	Neonatal Deaths
Oakham	0	18	-- <sup>1</sup>	0	0	0
Orange	0	81	5	11	0	0
Orleans	0	23	-- <sup>1</sup>	0	0	0
Otis	0	10	0	1	0	0
Oxford	1	170	10	7	0	0
Palmer	1	129	7	16	0	0
Paxton	0	33	-- <sup>1</sup>	3	1	1
Peabody	1	539	33	20	6	4
Pelham	0	9	0	0	0	0
Pembroke	0	275	14	5	1	0
Pepperell	0	149	5	8	0	0
Peru	0	8	0	0	0	0
Petersham	0	11	-- <sup>1</sup>	2	0	0
Phillipston	0	16	-- <sup>1</sup>	2	0	0
Pittsfield	777	484	44	58	1	0
Plainfield	0	5	0	0	0	0
Plainville	1	105	-- <sup>1</sup>	5	0	0
Plymouth	786	677	40	23	4	3
Plympton	0	33	-- <sup>1</sup>	0	0	0
Princeton	0	25	-- <sup>1</sup>	1	0	0
Provincetown	0	4	0	0	0	0
Quincy	2	1,151	84	39	5	4
Randolph	1	445	36	14	2	2
Raynham	0	124	9	4	1	1
Reading	1	287	19	9	2	1
Rehoboth	1	103	8	3	0	0
Revere	1	628	52	35	0	0
Richmond	0	10	0	0	0	0
Rochester	0	43	-- <sup>1</sup>	1	0	0
Rockland	0	230	19	19	2	2
Rockport	0	60	-- <sup>1</sup>	0	0	0
Rowe	0	5	0	0	0	0
Rowley	0	69	-- <sup>1</sup>	1	0	0
Royalston	0	7	0	1	0	0
Russell	0	14	0	2	0	0
Rutland	1	110	8	3	0	0
Salem	1,703	515	28	34	1	0
Salisbury	0	98	7	13	1	1
Sandisfield	0	5	0	0	0	0
Sandwich	1	218	7	4	0	0
Saugus	0	286	25	7	1	1
Savoy	0	6	0	1	0	0
Scituate	1	202	10	2	0	0
Seekonk	1	135	14	7	1	1
Sharon	2	213	15	3	1	1

**Table B-14A. Birth Characteristics: Occurrence and Resident Births and Infant Deaths,  
Massachusetts Municipalities: 2000**

Community	Occurrence Births	Resident Births	Low Birthweight	Teen Births, < 20 years	Infant Deaths	Neonatal Deaths
Sheffield	1	28	0	1	0	0
Shelburne	0	21	-- <sup>1</sup>	2	0	0
Sherborn	1	52	-- <sup>1</sup>	0	1	1
Shirley	0	64	-- <sup>1</sup>	4	0	0
Shrewsbury	0	462	19	5	0	0
Shutesbury	3	18	0	0	0	0
Somerset	0	138	8	9	1	1
Somerville	4	928	63	47	6	5
South Hadley	0	143	7	6	0	0
Southampton	0	56	-- <sup>1</sup>	2	0	0
Southborough	1	154	7	2	0	0
Southbridge	443	242	19	39	0	0
Southwick	1	113	-- <sup>1</sup>	8	0	0
Spencer	0	139	10	13	1	0
Springfield	5,912	2,503	227	477	15	8
Sterling	0	94	7	2	1	1
Stockbridge	0	10	0	1	0	0
Stoneham	0	263	18	2	1	1
Stoughton	1	320	27	12	0	0
Stow	1	88	5	0	0	0
Sturbridge	0	91	6	5	1	1
Sudbury	1	236	9	1	1	0
Sunderland	0	33	0	2	0	0
Sutton	0	123	9	4	1	1
Swampscott	0	175	11	1	1	1
Swansea	0	139	8	6	1	1
Taunton	637	769	64	62	2	1
Templeton	0	88	10	4	0	0
Tewksbury	0	391	24	8	1	0
Tisbury	1	37	-- <sup>1</sup>	3	0	0
Tolland	0	4	-- <sup>1</sup>	0	0	0
Topsfield	0	69	-- <sup>1</sup>	0	0	0
Townsend	1	115	6	4	0	0
Truro	0	14	0	0	0	0
Tyngsborough	0	187	12	8	0	0
Tyringham	0	2	0	0	0	0
Upton	1	112	11	3	1	0
Uxbridge	0	186	13	3	1	1
Wakefield	0	351	20	1	0	0
Wales	0	20	-- <sup>1</sup>	1	0	0
Walpole	0	303	18	4	0	0
Waltham	302	684	38	16	3	1
Ware	196	109	9	9	1	1
Wareham	488	225	9	20	0	0
Warren	0	58	-- <sup>1</sup>	5	0	0

**Table B-14A. Birth Characteristics: Occurrence and Resident Births and Infant Deaths, Massachusetts Municipalities: 2000**

Community	Occurrence Births	Resident Births	Low Birthweight	Teen Births, < 20 years	Infant Deaths	Neonatal Deaths
Warwick	1	9	0	1	0	0
Washington	0	1	0	0	0	0
Watertown	2	388	27	6	2	1
Wayland	2	180	9	0	1	1
Webster	1	195	13	14	0	0
Wellesley	88	351	21	1	0	0
Wellfleet	0	17	-- <sup>1</sup>	2	0	0
Wendell	0	5	-- <sup>1</sup>	0	1	1
Wenham	0	31	0	0	0	0
West Boylston	0	59	-- <sup>1</sup>	2	0	0
West Bridgewater	0	81	-- <sup>1</sup>	6	0	0
West Brookfield	0	30	-- <sup>1</sup>	3	0	0
West Newbury	0	47	-- <sup>1</sup>	0	0	0
West Springfield	0	291	14	23	0	0
West Stockbridge	0	7	0	1	0	0
West Tisbury	2	32	-- <sup>1</sup>	0	0	0
Westborough	3	243	21	10	3	3
Westfield	1	447	29	30	4	3
Westford	0	317	20	2	0	0
Westhampton	0	14	0	0	0	0
Westminster	0	77	-- <sup>1</sup>	2	0	0
Weston	1	93	8	0	0	0
Westport	0	126	8	6	1	1
Westwood	0	193	10	1	0	0
Weymouth	3,883	757	52	19	4	4
Whately	0	10	-- <sup>1</sup>	0	0	0
Whitman	0	195	17	6	1	1
Wilbraham	0	115	7	2	0	0
Williamsburg	0	22	-- <sup>1</sup>	0	0	0
Williamstown	0	46	-- <sup>1</sup>	0	1	0
Wilmington	0	318	15	2	2	2
Winchendon	1	118	9	12	0	0
Winchester	2,478	298	6	1	0	0
Windsor	1	6	-- <sup>1</sup>	0	0	0
Winthrop	0	171	15	7	0	0
Woburn	2	485	28	19	4	2
Worcester	6,223	2,535	220	297	25	18
Worthington	0	11	-- <sup>1</sup>	1	0	0
Wrentham	0	148	10	4	0	0
Yarmouth	0	204	15	14	3	3
Unknown	0	0	--	--	--	--

1. Values of 1-4 for medical characteristics of communities with less than 200 births are suppressed based on Guidelines for Release of Birth Data, Bureau of Health Statistics, Research and Evaluation, Massachusetts Department of Public Health.

**Table B-14B. Birth Characteristics, Occurrence and Resident Births and Infant Deaths by County, Massachusetts: 2000**

County Name	Occurrence		Resident Births		Deaths	
	Births	Number	Low Birthweight	Teen (< 20 years)	Infant	Neonatal
STATE TOTAL	82,673	81,582	5,711	5,395	377	288
Barnstable	1,634	1,992	119	97	13	10
Berkshire	1,262	1,210	72	123	3	0
Bristol	5,065	6,742	508	564	30	23
Dukes	112	143	6	5	0	0
Essex	8,280	9,553	626	750	54	43
Franklin	512	706	45	56	1	1
Hampden	6,313	5,900	460	802	25	15
Hampshire	1,108	1,274	81	58	5	4
Middlesex	17,164	19,381	1,255	667	81	63
Nantucket	102	141	10	6	1	1
Norfolk	4,624	8,555	538	163	24	22
Plymouth	3,704	6,415	448	392	33	26
Suffolk	23,365	9,560	848	938	57	45
Worcester	9,428	10,010	695	774	50	35



Table B-14C. Birth Characteristics, Occurrence and Resident Births and Infant Deaths,  
Massachusetts Community Health Network Areas (CHNAs): 2000

Community Health Network Area	Occurrence Births	Resident Births		Deaths	
		Number	Low Birthweight ( $< 20$ years)	Infant	Neonatal
STATE TOTAL	82,673	81,582	5,711	377	288
Community Health Network of Berkshire County	1,262	1,210	72	3	0
Upper Valley Health Web (Franklin County)	512	872	54	2	1
Partnership for Health in Hampshire County (Northampton)	1,108	1,252	81	5	4
The Community Health Connection (Springfield)	5,914	3,923	295	17	9
Community Health Network of Southern Worcester County	445	1,387	101	3	1
Community Partners for Health (Milford)	782	2,361	148	68	11
Community Health Network of Greater Metro West (Framingham)	2,493	5,517	355	143	18
Community Wellness Coalition (Worcester)	6,225	3,944	297	339	20
Fitchburg/Gardner Community Health Network	1,980	3,269	212	263	9
Greater Lowell Community Health Network	2,836	4,033	260	316	15
Greater Lawrence Community Health Network	2,772	2,797	181	325	17
Greater Haverhill Community Health Network	1,214	1,842	135	109	5
Community Health Network North (Beverly/Gloucester)	2,588	1,319	73	54	1
North Shore Community Health Network	1,706	3,595	237	262	20
Greater Woburn/Concord/Littleton Community Health Network	3,997	2,641	135	30	9
North Suburban Health Alliance (Medford/Malden/Melrose)	2,053	3,409	242	76	9
Greater Cambridge/Somerville Community Health Network	2,167	3,220	207	87	12
West Suburban Health Network (Newton/Waltham)	3,714	2,967	191	29	6
Alliance for Community Health (Boston/Chelsea/Revere/Winthrop)	23,366	10,174	474	885	45
Blue Hills Community Health Alliance (Greater Quincy)	4,523	4,714	293	112	12
Four (For) Communities (Holyoke, Chicopee, Ludlow, Westfield)	399	1,918	159	238	6
Greater Brockton Community Health Network	2,429	3,274	280	272	16
South Shore Community Partners in Prevention (Plymouth)	787	2,439	145	83	7
Greater Attleboro-Taunton Health & Education Response	1,852	3,375	249	183	5
Partners for a Healthier Community (Fall River)	1,654	1,590	136	175	13
Greater New Bedford Health & Human Services Coalition	2,047	2,264	153	250	8
Cape and Islands Community Health Network	1,848	2,276	135	108	11



## DEATHS



## SECTION C

### DEATHS

The number of Massachusetts resident deaths increased from 1999 (55,763 deaths) to 2000 (56,591 deaths). However, the 2000 death rate of 891.3 per 100,000 population was only slightly higher than the 1999 death rate of 880.6. As with live births, Massachusetts resident deaths include all deaths to Massachusetts residents regardless of the state in which the deaths occurred. Most data presented in this section are resident data. Occurrence data are used only for medical examiner data.

#### DEATHS BY RACE/ETHNICITY

From 1999 to 2000, the number of deaths by race/ethnicity remained relatively constant with White non-Hispanic residents comprising 94.7% of total deaths in Massachusetts. Black non-Hispanic deaths totaled 3.5% of total deaths, Hispanic deaths 1.1%, and Asian/Pacific Islander non-Hispanic deaths 0.6%.

Prior to 1989, only a race question was included on death certificates. A separate item on Hispanic origin was added to the death record beginning January 1, 1989. This item asks whether the decedent was of Hispanic origin. If answered affirmatively, then specific Hispanic origin (e.g., Puerto Rican, Dominican, Cuban, etc.) is requested.

#### DEATHS BY AGE

Persons 75 years of age or older accounted for 63.0% of all resident deaths. The percent of deaths to residents in this age group vary widely by sex and race/ethnicity.

SEX	RACE	% OF DEATHS UNDER AGE 75	% OF DEATHS 75 YEARS AND OLDER
MALE	WHITE NON-HISPANIC	44.85	55.15
	BLACK NON-HISPANIC	71.48	28.52
	HISPANIC	84.52	15.48
	ASIAN	68.83	31.17
	OTHER/UNKNOWN	78.26	21.74
	TOTAL	47.07	52.93
FEMALE	WHITE NON-HISPANIC	26.57	73.43
	BLACK NON-HISPANIC	54.60	45.40
	HISPANIC	68.36	31.64
	ASIAN	50.46	49.54
	OTHER/UNKNOWN	52.38	47.62
	TOTAL	28.32	71.68
TOTAL	WHITE NON-HISPANIC	34.92	65.08
	BLACK NON-HISPANIC	63.30	36.70
	HISPANIC	77.32	22.68
	ASIAN	60.22	39.78
	OTHER/UNKNOWN	65.91	34.09
	TOTAL	36.97	63.03

## DEATHS BY PLACE OF OCCURRENCE

Between 1999 and 2000, there was little variation in the sites where deaths occurred. The data are presented below:

SITE	% OF DEATHS 2000	% OF DEATHS 1999
HOSPITAL	44.6	45.1
NURSING OR REST HOME	30.7	30.2
AT HOME	20.8	20.6
EN ROUTE TO HOSPITAL OR DEAD ON ARRIVAL	1.8	1.8
OTHER AND UNKNOWN <sup>1</sup>	2.2	2.2
TOTAL	100.0	100.0

## DEATHS BY CAUSE

In 1999, the International Classification of Disease, Tenth Revision (ICD-10) replaced the Ninth revision of this coding system. The World Health Organization developed the International Classification of Disease and the United States adopted it in accordance with an international agreement, to promote international comparability in collecting, classifying, and tabulating mortality statistics.

Cause of death statistics in this report are based on the Tenth Revision of the International Classification of Diseases (ICD-10). The methodology of coding cause of death from death certificates is consistent nationally, using the Automated Classification of Medical Entities (ACME), developed by the National Center for Health Statistics (NCHS). The ACME system requires every disease or condition mentioned on the record to be coded. The underlying cause is then selected by a computer program which incorporates the ICD-10 rules and conventions. Cause of death information in this report is based on underlying cause, except where otherwise noted.

The leading causes of death differed markedly by race and ethnicity in 2000, as in previous years. Nine of the ten leading causes of death for White non-Hispanics were chronic conditions (e.g., heart disease, cancer, stroke, respiratory illness, and diabetes) which usually afflict older people. The leading causes of death for Blacks non-Hispanics included AIDS/HIV-related diseases and perinatal conditions, which occur more frequently among younger people. For Asians non-Hispanics, motor vehicle-related injuries, unintentional non-transport injuries, and perinatal conditions were among the top ten leading causes of death; although these numbers are fairly low and should be interpreted with caution. For Hispanics, AIDS/HIV-related diseases, perinatal conditions, homicide,

<sup>1</sup> Other and Unknown includes prison or other institutions and all other places.

motor vehicle injuries, and injuries of undetermined intent were among the leading causes of death in 2000.

#### ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS)

In 2000, 226 Massachusetts residents died from AIDS and HIV-related illnesses. This number of deaths is a decrease of 16 from 1999. This represents a continuing downward trend in the number of HIV/AIDS deaths since 1995. The marked decline in the number of deaths from AIDS and HIV-related diseases since 1996 is due in large part to improved treatment efforts that have resulted in increased longevity. The proportion of female HIV/AIDS deaths increased between 1999 and 2000 as did the proportion among those 45 years and older when compared with previous years.

#### DEATHS CERTIFIED BY MEDICAL EXAMINERS

The total number of deaths certified by medical examiners decreased slightly from 3,783 in 1999 to 3,753 in 2000. Of the deaths certified by medical examiners, 44.0% were reported as a result of natural causes. The percentage of deaths due to natural causes (i.e., non-injury related causes) certified by medical examiners varies somewhat by county, from a high of 59.6% in Franklin County to a low of 18.2% in Dukes County (this percentage is based on only 11 deaths and should be interpreted with caution). Suffolk County had the greatest percentage of deaths (27.1%) that were referred to medical examiners, while the highest number of such deaths was in Middlesex County with 2,389 deaths.

#### COMMUNITY HEALTH NETWORK AREAS (CHNA)

The Department of Public Health, in collaboration with health service providers, coalition members, and other interested citizens, has designated 27 geographic areas for community health planning. It is the Department's intention to foster in each of these areas the development of Community Health Networks--consortia of health care providers, human service agencies, schools, churches, youth, parents, elders, advocacy groups, and individual consumers--to address the health needs of the community. These community coalitions will participate in monitoring outcomes and the progress of strategies and responses to those health needs. The data published in this edition reflect the new definitions of CHNAs instituted in January 1997.

A Community Health Network Area (CHNA) is defined as an aggregation of cities and towns. The city of Boston constitutes its own Community Health Network Area. It is hoped that the Networks will mobilize around key health issues impacting the community, promote prevention efforts, enhance access to health care, provide opportunities for more collaboration among agencies, and create a client-centered, outcome-oriented health service delivery system. Community Health Networks will also promote efficiency in service delivery by working to reduce duplication and overlap, and by identifying gaps in service.

Leading Causes of Death by Race/Ethnicity, 2000

Cause	White non-Hispanic		Black non-Hispanic		Hispanic		Asian non-Hispanic		Total	
	#	%	Cause	#	%	Cause	#	%	Cause	#
Heart disease	14,573	27.5	Cancer	535	25.4	Cancer	185	18.2	Cancer	125
Cancer	13,154	24.8	Heart disease	470	22.3	Heart disease	167	16.5	Heart disease	91
Stroke	3,426	6.5	Stroke	118	5.6	AIDS/HIV-related diseases	59	5.8	Stroke	47
Chronic Lower Respiratory Disease	2,810	5.3	Nephritis	83	3.9	Diabetes	56	5.5	Motor Vehicle Related Injuries	20
Influenza and Pneumonia	2,031	3.8	Diabetes	72	3.4	Stroke	51	5	Chronic Lower Respiratory Disease	14
Alzheimer's Disease	1,391	2.6	AIDS/HIV-related diseases	61	2.9	Motor Vehicle Related Injuries	39	3.8	Diabetes	12
Diabetes	1,211	2.3	Septicemia	54	2.6	Chronic Lower Respiratory Disease	35	3.5	Unintentional non-transport injury	12
Nephritis	1,115	2.1	Chronic Lower Respiratory Disease	52	2.5	Perinatal conditions	35	3.5	Perinatal conditions	10
Septicemia	816	1.5	Perinatal conditions	46	2.2	Injuries of Undetermined Intent <sup>2</sup>	35	3.5	Septicemia	8
Unintentional non-transport Injuries <sup>1</sup>	773	1.5	Influenza and Pneumonia	45	2.1	Homicide	27	2.7	Pneumonia & Influenza	8
All other causes	11,659	22	All other causes	573	27.2	All other causes	325	32.1	All other causes	120
Total	52,959	100.0 (99.9)	Total	2,109	100 (100.1)	Total	1,014	100 (100.1)	Total	467
										100 (99.9)

<sup>1</sup> Unintentional Injuries such as falls, fires, and drowning that were not intended to occur.

<sup>2</sup> Injuries such as falls, fires, poisonings and drownings where there was not enough information to determine intent.



## DEFINITIONS IMPORTANT FOR THIS SECTION INCLUDE:

### AGE-ADJUSTED RATE

A procedure for adjusting rates, designed to minimize the effects of differences in age distribution when comparing rates for different populations. This procedure is accomplished by the computational process known as age standardization, whereby mortality statistics are adjusted to a reference population. For this publication, the reference population is the 2000 US population, the same as used by the National Center for Health Statistics. The result of the process is a summary index that can be used to compare rates of different populations throughout the nation and over time.

### DEATH CERTIFICATE

A vital record signed by a licensed physician that includes cause of death, decedent's name, sex, birth date, place of residence, and place of occurrence.

### INTERNATIONAL CLASSIFICATION OF DISEASES, NINTH REVISION

The International Classification of Disease (ICD) classifies mortality information for statistical purposes. The ICD was first used in 1900 and has since been revised about every 10 years. The Tenth Revision is used to code mortality data beginning with 1999.

### MISER

The Massachusetts Institute for Social and Economic Research. This research institute, which was located at the University of Massachusetts in Amherst, produced the official population estimates and projections for the Department of Public Health through 1998.

### OCCURRENCE DEATH

Occurrence deaths include all deaths that occur within the state, including deaths of non-residents. An interstate exchange agreement among the 50 states and Canada provides for exchanges of copies of birth and death records. These records are used for statistical purposes only, and allow each state or province to track the births and deaths of residents.

### RACE

For death records, race is provided by the death record informant (for example, spouse or next of kin).

## RESIDENT DEATH

The death of a person whose usual place of residence or permanent address (as reported by the informant) is in one of the 351 cities or towns of Massachusetts, regardless of where the death took place. Unless otherwise noted, all data in this publication are resident data. An interstate exchange agreement among the 50 states, Canada, Puerto Rico, Guam, the Virgin Islands, and the District of Columbia provides for exchange of copies of birth and death records. These records are used for statistical purposes only, and allow each state or province to track the births and deaths of residents.

## UNDERLYING CAUSE OF DEATH

The underlying cause of death is: 1.) the disease or injury that initiated the series of events leading to death, or 2.) the circumstances of the unintentional or intentional injury that resulted in the death. See Death Certificate.

## RATES IMPORTANT FOR THIS SECTION INCLUDE:

AGE-SPECIFIC DEATH RATE	$\frac{\text{Number of Resident Deaths in Specific Age Group}}{\text{Total Population of Specific Age Group}} \times 100,000$
----------------------------	---

CAUSE-SPECIFIC DEATH RATE	$\frac{\text{Number of Resident Deaths for a Specific Cause}}{\text{Total Population}} \times 100,000$
------------------------------	--

CRUDE DEATH RATE	$\frac{\text{Number of Resident Deaths In a Year}}{\text{Total Population}} \times 100,000$
---------------------	---

**Figure C-1. Daily Death Statistics  
Massachusetts: 2000**

Every day in 2000, residents of Massachusetts experienced an average of the following:

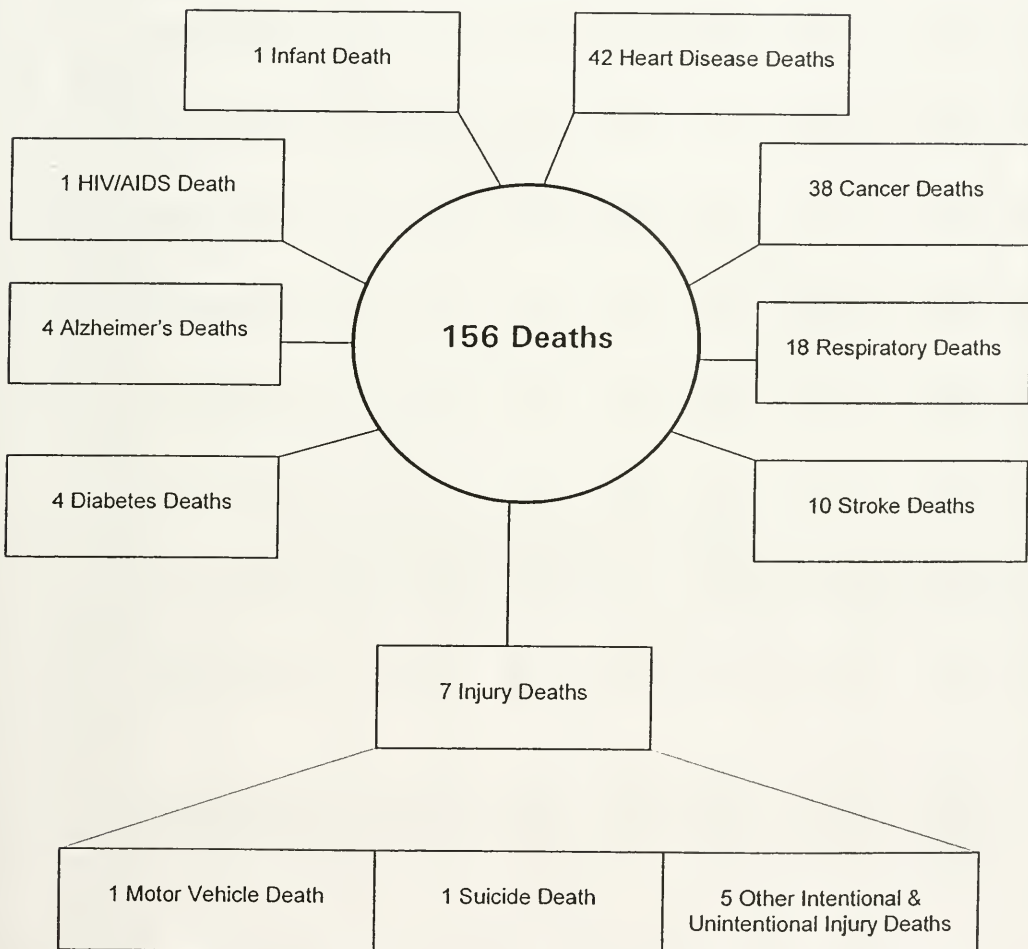


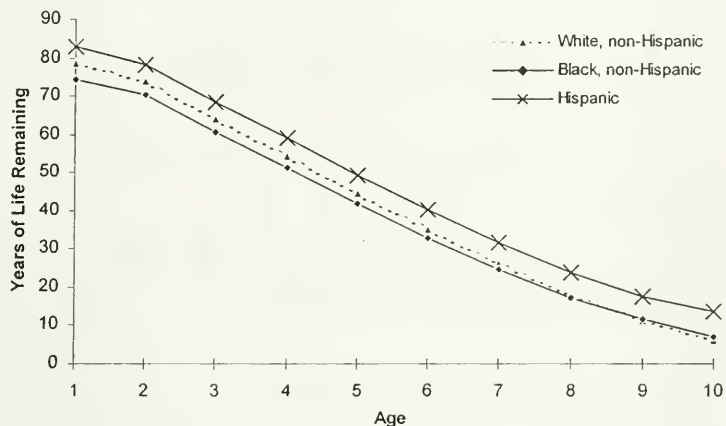
Table C-1. Trends in Mortality Characteristics, Massachusetts: 1990 - 2000

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Resident deaths<sup>1</sup></b>											
Number	53,004	53,011	53,805	55,557	54,914	55,296	55,187	54,634	55,204	55,763	56,591
Crude rate <sup>2,3,4</sup>	881.0	880.9	891.2	916.2	899.2	900.2	892.4	877.3	877.5	881.9	891.3
Age-adjusted rate <sup>5</sup>	878.4	884.2	877.4	885.7	868.2	866.2	853.0	834.8	808.8	808.8	816.5
<b>Race/ethnicity of decedent<sup>6,7</sup></b>											
White, non-Hispanic											
Number	50,178	50,142	50,815	52,371	51,600	51,785	51,917	51,398	51,829	52,282	52,959
Percent	94.7	94.6	94.4	94.3	94.0	93.7	94.1	94.1	93.9	93.8	93.6
Age-adjusted rate	875.7	882.7	875.5	882.8	864.2	860.1	852.2	835.1	808.5	808.7	816.2
Black, non-Hispanic											
Number	1,875	1,887	1,958	1,969	2,079	2,136	2,025	2,033	1,969	2,018	2,109
Percent	3.5	3.6	3.6	3.5	3.8	3.9	3.7	3.7	3.6	3.6	3.7
Age-adjusted rate	1,113.7	1,104.6	1,139.2	1,115.3	1,176.7	1,193.0	1,141.1	1,142.1	1,076.6	995.2	992.4
Asian/Pacific Islander, non-Hispanic											
Number	294	269	284	360	335	403	398	403	413	449	467
Percent	0.6	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8
Age-adjusted rate	570.8	482.7	463.8	613.4	521.2	565.2	534.5	512.0	500.7	422.4	418.5
Hispanic											
Number	602	678	713	813	865	936	803	749	924	975	1,014
Percent	1.1	1.3	1.3	1.5	1.6	1.7	1.5	1.4	1.7	1.7	1.8
Age-adjusted rate	409.9	435.5	440.5	488.5	482.7	504.7	430.0	391.0	463.8	507.8	596.0 <sup>9</sup>
<b>Gender of decedent<sup>7</sup></b>											
Female											
Number	27,491	27,550	27,770	29,109	28,733	29,262	29,152	29,261	29,598	29,786	30,465
Age-adjusted rate	713.6	720.9	711.1	724.5	712.6	717.6	702.7	699.0	678.0	676.9	691.6
Male											
Number	25,513	25,461	26,035	26,448	26,181	26,034	25,035	25,373	25,635	25,977	26,126
Age-adjusted rate	1,130.3	1,134.1	1,130.2	1,123.5	1,096.9	1,080.6	1,074.0	1,035.0	1,000.8	1,001.6	996.7
<b>Age of decedent<sup>7</sup></b>											
<1 year											
Number	651	577	569	523	499	419	403	425	414	418	377
1-14 years											
Number	205	207	226	239	192	204	197	174	128	165	181
15-24 years											
Number	586	538	470	464	473	452	434	422	413	407	403
25-44 years											
Number	2,682	2,912	3,062	3,055	3,210	3,196	2,720	2,348	2,373	2,397	2,375
45-64 years											
Number	8,138	7,877	7,973	7,920	7,766	7,611	7,477	7,416	7,501	7,431	7,841
65-74 years											
Number	11,707	11,415	11,515	11,509	11,394	10,858	10,711	10,286	10,216	9,782	9,746
75-84 years											
Number	15,553	15,506	15,912	16,346	16,497	16,839	16,839	16,884	17,397	17,554	17,554
85+ years											
Number	13,482	13,973	14,076	15,494	15,283	16,054	16,400	16,677	17,213	17,765	18,113

1. Deaths presented in all tables and figures are resident deaths. 2. Deaths per 100,000 residents. 3. See Section Definitions for further explanation of terms and rates. 4. Rate calculations are based on resident population estimates from MISER for 1991-1995 (released in September 1999), 1996-1997 (released in November 1999), and 1998 (released in September 2000). Residents deaths rates for 1999 have been recalculated using 1999 population estimates. 2000 rates are calculated using 2000 population estimates. 5. Rates are age-adjusted per 100,000 residents using the 2000 US standard population. 6. Race and ethnicity data in this table are presented as mutually exclusive categories. Persons of Hispanic ethnicity are not included in a race category. 7. Column sum may not equal total because the race, gender or age of some decedents was unknown. 8. Percent of all resident deaths in that year. 9. The 17% increase in the death rate for Hispanics is due mainly to the recalculation of the Hispanic population. The Census 2000 count for Hispanics 65 years and older is lower than the number previously estimated. Thus, the death rate (the number of deaths divided by the population) is increased relative to past calculations. The actual number of deaths to persons of Hispanic ethnicity increased only 4% from 1999 to 2000.

Figure C-2

Expected Years of Life Remaining at Different Ages by Race,  
Massachusetts: 2000



Years of Life Remaining<sup>1</sup>, Massachusetts: 2000

At Age:	All	White, non-Hispanic		Black, non-Hispanic		Hispanic		White, non-Hispanic		Black, non-Hispanic		Hispanic	
		Females	Females	Females	Females	Males	Males	Females	Females	Males	Males	Males	Males
Birth	78.5	80.8	80.9	77.2	84.8	75.9	76.1	70.9	80.8				
1 year old	77.9	80.1	80.2	77.3	84.3	75.3	75.4	70.9	80.2				
5 years old	73.9	76.2	76.2	73.4	80.4	71.4	71.5	67.0	76.3				
15 years old	64.0	66.3	66.3	63.6	70.5	61.5	61.6	57.3	66.5				
25 years old	54.3	56.4	56.4	53.8	60.7	51.9	51.9	48.0	57.0				
35 years old	44.6	46.7	46.7	44.3	51.0	42.3	42.3	38.9	47.8				
45 years old	35.3	37.1	37.1	35.1	41.7	33.1	33.1	29.8	39.1				
55 years old	26.3	28.0	27.9	26.7	32.6	24.3	24.3	22.1	30.6				
65 years old	18.2	19.6	19.5	18.9	24.3	16.5	16.4	15.4	23.7				
75 years old	11.5	12.4	12.3	12.5	17.7	10.2	10.1	10.1	18.3				
85 years old	6.4	6.8	6.7	7.3	13.1	5.7	5.6	6.9	14.9				

1. Years of Life Remaining calculated using the Greville Abridged Life Table Method. (source: Dublin LI. Length of Life - A Study of the Life Table, Ronald Press Co. New York, 1949.) DPH 2000 Preliminary Population Estimates (released January 2002) are used as the denominator.

**Table C-2.<sup>1</sup> Five Leading Causes of Death<sup>1</sup> Comparability Unmodified and Comparability Modified Age-Adjusted Rates, Massachusetts and United States: 1990-2000**

Year <sup>2</sup>	Heart Disease				Cancer				Stroke			
	MA		US		MA		US		MA		US	
	Comparability Unmodified <sup>3</sup>	Comparability Modified <sup>4</sup>	Comparability Unmodified <sup>3</sup>	Comparability Modified <sup>4</sup>	Comparability Unmodified <sup>3</sup>	Comparability Modified <sup>4</sup>	Comparability Unmodified <sup>3</sup>	Comparability Modified <sup>4</sup>	Comparability Unmodified <sup>3</sup>	Comparability Modified <sup>4</sup>	Comparability Unmodified <sup>3</sup>	Comparability Modified <sup>4</sup>
1990	Rate <sup>5</sup> 294.6	NA <sup>6</sup> 325.9	NA 33.9	NA	221.5 25.3	NA	213.9 23.3	NA	55.0 6.2	NA	65.5 6.7	NA
1991	% of Total 286.0	NA	317.9	NA	230.0 26.0	NA	213.7 23.5	NA	54.7 6.2	NA	63.4 6.6	NA
1992	Rate 277.4	NA	310.5	NA	234.2 26.3	NA	212.3 23.7	NA	53.7 6.2	NA	62.1 6.6	NA
1993	% of Total 278.3	NA	314.6	NA	228.1 25.2	NA	212.5 23.1	NA	52.8 6.1	NA	63.2 6.6	NA
1994	Rate 265.3	261.5	304.5	253.2	224.7 25.3	226.3	211.0 23.2	212.4	51.7 6.1	54.7	63.3 6.7	60.1
1995	% of Total 259.4	255.7	301.3	250.1	225.6 25.4	227.2	209.6 23.1	211.0	52.9 6.3	55.9	63.9 6.8	61.3
1996	Rate 257.1	253.4	293.4	243.8	221.2 25.2	222.7	206.7 23.1	208.1	50.5 6.1	53.4	63.2 6.9	61.0
1997	% of Total 249.0	245.5	285.7	237.2	215.4 25.0	216.8	203.7 23.1	205.1	50.6 6.2	53.5	61.8 6.9	60.1
1998	Rate 231.0	227.7	272.4	269.7	209.0 25.0	210.4	202.4 23.0	204.4	47.1 6.0	49.7	59.5 6.8	63.1
1999	% of Total 222.1 <sup>7</sup> 27.9	267.8 30.3	206.6 <sup>7</sup> 24.8	202.7 23.0	206.6 <sup>7</sup> 24.8	202.7 23.0	202.7 23.0	204.4	50.7 <sup>7</sup> 6.4	50.7 <sup>7</sup> 6.4	61.8 7.0	63.1
2000	Rate 218.0 <sup>7</sup> 27.1	257.5 <sup>8</sup> 29.5	206.9 <sup>7</sup> 24.8	200.5 <sup>8</sup> 23.0	206.9 <sup>7</sup> 24.8	200.5 <sup>8</sup> 23.0	200.5 <sup>8</sup> 23.0	204.4	51.2 <sup>7</sup> 6.4	51.2 <sup>7</sup> 6.4	60.2 <sup>8</sup> 6.9	63.1

1. Cause of death, the disease or injury that initiated the events leading to death, or the circumstances of the unintentional or intentional injury that resulted in the death. 2. 1990-1998 data coded according to ICD-9, 1999 and 2000 data coded according to ICD-10. ICD-9 and ICD-10 codes used in this publication are listed on page 122. 3. Comparability unmodified rate: this rate has not been modified to account for changes from ICD-9 to ICD-10. 4. Comparability modified rate: this rate is adjusted using the preliminary comparability ratio (CR) from NCHS, February 2001 in order to account for changes from ICD-9 to ICD-10. 5. All rates are age-adjusted per 100,000 residents using the 2000 US standard population. US data for years 1990-1998 obtained from Compressed Mortality File on CDC Wonder, February 2001. 6. NA, comparability ratio is not applicable for years prior to 1994. 7. When comparing data over time between 1994 through 2000, please use the comparability modified rates for years 1994-1998. 8. US data for 2000 obtained from NCHS. Deaths: Preliminary Data for 2000. National Vital Statistics Report, Vol. 49, No. 12, October 9, 2001.

Table C-2' (continued). Five Leading Causes of Death<sup>1</sup> Comparability Unmodified and Comparability Modified Age-Adjusted Rates, Massachusetts and United States: 1990-2000

Year <sup>2</sup>	Influenza/Pneumonia				Unintentional Injuries				All Causes	
	MA	US	MA	US	MA	US	MA	US	MA	US
	Comparability Unmodified <sup>3</sup>	Comparability Unmodified <sup>3</sup>	Comparability Modified <sup>4</sup>	Comparability Modified <sup>4</sup>	Comparability Unmodified <sup>3</sup>	Comparability Modified <sup>4</sup>	Comparability Unmodified <sup>3</sup>	Comparability Modified <sup>4</sup>		
1990	38.9	35.8	NA <sup>6</sup>	NA	24.8	NA	37.5	NA	878.4	938.0
	Rate <sup>5</sup>	4.4	3.6		2.9	4.3				
% of Total	40.1	34.4	NA		23.1	NA	36.0	NA	884.2	925.2
1991	4.5	3.5			2.7	4.1				
Rate	38.5	32.7	NA		20.6	NA	34.6	NA	877.4	910.7
% of Total	4.5	3.4			2.4	4.0				
1992	4.5	3.4			21.3	NA	35.7	NA	885.7	931.3
Rate	42.9	34.8	NA		2.4	4.0				
% of Total	5.0	3.6			20.7	20.6	35.7	35.1	868.2	920.0
1993	4.4	33.4	23.3		2.4	4.0				
Rate	40.4	28.2			18.8	18.8	36.0	35.4	866.2	918.4
% of Total	4.8	3.5			2.2	4.0				
1994	4.1	33.5	23.4		19.5	19.5	36.2	35.6	853.0	902.1
Rate	41.2	28.7			2.3	4.1				
% of Total	4.9	3.6			19.7	19.7	36.0	35.3	834.8	887.0
1995	5.1	32.9	23.0		2.3	4.1				
Rate	39.1	27.3			19.9	19.8	35.0	36.1	808.8	875.4
% of Total	4.9	3.7			2.4	4.2				
1996	40.2	34.6	24.2							
Rate	5.2	3.9								
% of Total	5.2	3.9								
1997	30.3 <sup>7</sup>	23.6			19.3 <sup>7</sup>	35.9			808.8	881.9
Rate	3.9	2.7			2.3	4.1				
% of Total	29.3 <sup>7</sup>	24.3 <sup>8</sup>			20.3 <sup>7</sup>	33.9 <sup>8</sup>			816.5	872.4 <sup>8</sup>
1998	3.7	2.8			2.4	3.9				
Rate										
% of Total										
1999										
Rate										
% of Total										
2000										
Rate										
% of Total										

1. Cause of death: the disease or injury that initiated the events leading to death; or the circumstances of the unintentional or intentional injury that resulted in the death. 2. 1990-1998 data coded according to ICD-9, 1999 and 2000 data coded according to ICD-10. ICD-9 and ICD-10 codes used in this publication are listed in the on page 122. 3. Comparability unmodified rate: this rate has not been modified to account for changes from ICD-9 to ICD-10. 4. Comparability modified rate: this rate is adjusted using the preliminary comparability ratio (CR) from NCHS, February 2001 in order to account for changes from ICD-9 to ICD-10. 5. All rates are age-adjusted per 100,000 residents using the 2000 US standard population. US data for years 1990-1998 obtained from Compressed Mortality File on CDC Wonder, February 2001. 6. NA, comparability ratio is not applicable for years prior to 1994. 7. When comparing data over time between 1994 through 2000, please use the comparability modified rate for years 1994-1999. 8. US data for 2000 obtained from NCHS. Deaths: Preliminary Data for 2000. National Vital Statistics Report, Vol. 49, No. 12, October 9, 2001.



**Table C-3A. Leading Causes of Death, Numbers and Age-Specific Rates, Massachusetts: 2000**

Age	Cause of death <sup>1</sup>	Deaths	
		Number	Rate <sup>2</sup>
1 – 14 years	<b>TOTAL</b>	<b>181</b>	<b>15.3</b>
	Cancer	31	2.6
	Unintentional non-transport injuries <sup>3</sup>	29	2.5
	Motor vehicle-related injuries	16	1.4
	Heart Disease	15	1.3
15 - 24 years	<b>TOTAL</b>	<b>403</b>	<b>49.1</b>
	Motor vehicle-related injuries	121	14.8
	Suicide	53	6.5
	Injuries of undetermined intent <sup>4</sup>	51	6.2
	Homicide	45	5.5
25 – 44 years	<b>TOTAL</b>	<b>2,375</b>	<b>119.4</b>
	Cancer	456	22.9
	Heart Disease	329	16.5
	Injuries of undetermined intent <sup>4</sup>	285	14.3
	Suicide	178	8.9
45 – 64 years	<b>TOTAL</b>	<b>7,841</b>	<b>552.3</b>
	Cancer	3,108	218.9
	Heart Disease	1,699	119.7
	Chronic Lower Respiratory Disease <sup>5</sup>	267	18.8
	Diabetes	245	17.3
65 + years <sup>6</sup>	<b>TOTAL</b>	<b>45,413</b>	<b>5,279.6</b>
	Heart Disease	13,235	1,538.7
	Cancer	10,376	1,206.3
	Stroke	3,371	391.9
	Chronic Lower Respiratory Disease <sup>5</sup>	2,619	304.5

1. Cause of Death classified using ICD-10. See page 122 for ICD-10 codes. 2. Number of deaths per 100,000 residents in each age group.  
3. Unintentional non-transport injuries include injuries such as falls, fires, and drownings that were not intended to occur. Motor vehicle-related injuries and other transportation-related injuries are not included in these numbers. 4. Injuries of undetermined intent include deaths from drug overdoses, falls, and fires where the investigation has not determined whether the injuries were unintentional or purposely inflicted.  
5. The title of this cause of death has changed between ICD-10 and ICD-9. Chronic Lower Respiratory Disease (ICD-10 title) corresponds to Chronic Obstructive Pulmonary Disease (COPD) (ICD-9 title). 6. See Table C-3b for leading causes of death for detailed age groups for persons ages 65+ years.



**Table C-3B. Leading Causes of Death Among the Oldest Age Groups,  
Numbers and Age-Specific Rates, Massachusetts: 2000**

Age	Cause of death <sup>1</sup>	Deaths	
		Number	Rate <sup>2</sup>
65-74 years	<b>TOTAL</b>	<b>9,746</b>	<b>2,278.0</b>
	Cancer	3,639	850.6
	Heart Disease	2,341	547.2
	Chronic Lower Respiratory Disease <sup>3</sup>	674	157.5
	Stroke	438	102.4
75-84 years	<b>TOTAL</b>	<b>17,554</b>	<b>5,561.4</b>
	Heart Disease	4,826	1,529.0
	Cancer	4,493	1,423.5
	Stroke	1,254	397.3
	Chronic Lower Respiratory Disease <sup>3</sup>	1,171	371.0
85+ years	<b>TOTAL</b>	<b>18,113</b>	<b>15,522.1</b>
	Heart Disease	6,068	5,200.0
	Cancer	2,244	1,923.0
	Stroke	1,679	1,438.8
	Influenza and Pneumonia	1,161	994.9

1. Cause of Death classified according to ICD-10. See page 122 for ICD-10 codes. 2. Number of deaths per 100,000 residents in each age group.

3. The title of this cause of death has changed between ICD-10 and ICD-9. Chronic Lower Respiratory Disease (ICD-10 title) corresponds to Chronic Obstructive Pulmonary Disease (COPD) (ICD-9 title).

Figure C-3

**Trends in Deaths from Selected Causes,  
Massachusetts: 1842-2000**

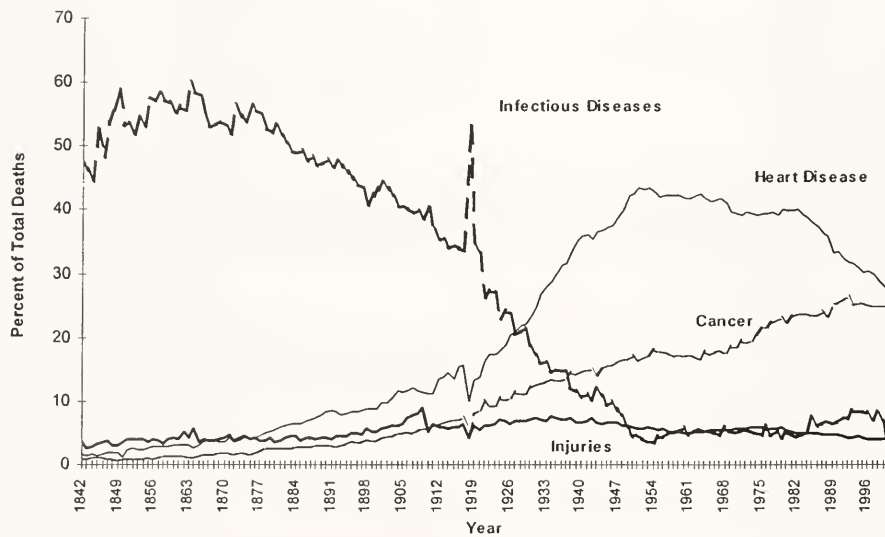


Table C-4. Leading Causes of Death<sup>1</sup> and Age-Adjusted Death Rates by Race and Hispanic Ethnicity, Massachusetts: 2000

<u>White, non-Hispanic<sup>2</sup></u>			<u>Black, non-Hispanic<sup>2</sup></u>			<u>Asian/Pacific Islander, non-Hispanic<sup>2</sup></u>			<u>Hispanic</u>		
Cause <sup>3</sup>	#	Rate <sup>4</sup>	Cause	#	Rate	Cause	#	Rate	Cause	#	Rate
Total	52,959	816.2	Total	2,109	992.4	Total	467	418.5	Total	1,014	596.0 <sup>7</sup>
Heart disease	14,573	220.0	Cancer	535	252.3	Cancer	125	103.2	Cancer	185	126.0
Cancer	13,154	206.1	Heart Disease	470	235.4	Heart Disease	91	89.1	Heart Disease	167	117.8
Stroke	3,426	50.7	Stroke	118	64.5	Stroke	47	52.6	HIV/AIDS	59	17.7
Chronic Lower Resp. Disease <sup>5</sup>	2,810	43.0	Nephritis	83	42.3	Motor Vehicle-Related Injuries	20	8.1	Diabetes	56	42.1
Influenza and Pneumonia	2,031	29.7	Diabetes	72	35.9	Chronic Lower Resp. Disease <sup>5</sup>	14	16.6	Stroke	51	45.9
Alzheimer's Disease	1,391	20.1	HIV/AIDS	61	19.5	Diabetes	12	12.1	Motor Vehicle-Related Injuries	39	10.1
Diabetes	1,211	18.8	Septicemia	54	25.9	Unintentional non-transport injuries <sup>6</sup>	12	9.7	Chronic Lower Resp. Disease <sup>5</sup>	35	25.2
Nephritis	1,115	16.8	Cronic Lower Resp. Disease <sup>5</sup>	52	27.5	Perinatal Conditions	10	3.8	Perinatal Conditions	35	5.4
Septicemia	816	12.5	Perinatal Conditions	46	12.1	Septicemia	8	8.6	Injuries of Undetermined Intent	35	7.7
Unintentional non-transport injuries <sup>6</sup>	773	12.1	Influenza and Pneumonia	45	26.5	Influenza and Pneumonia	8	7.8	Homicide	27	5.3

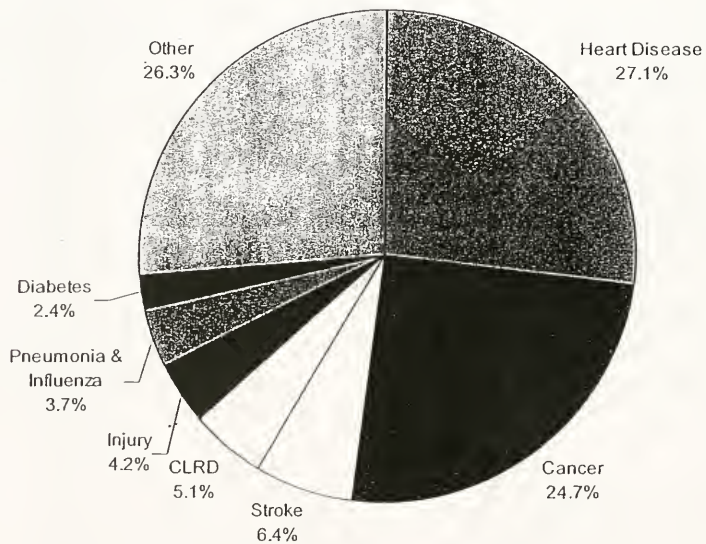
### Total

Cause	#	Rate
Total	56,691	816.5
Heart disease	15,313	218.0
Cancer	14,006	206.9
Stroke	3,645	51.2
Chronic Lower Respiratory Disease <sup>5</sup>	2,911	41.9
Influenza and Pneumonia	2,110	29.3
Alzheimer's Disease	1,427	19.7
Diabetes	1,353	19.7
Nephritis	1,230	17.6
Septicemia	896	12.9
Unintentional non-transport injuries <sup>6</sup>	842	12.2

1. Ranking based on number of deaths. 2. Race and ethnicity data in this table are presented as mutually exclusive categories. Persons of Hispanic ethnicity are not included in a race category. 3. Underlying Cause of Death based on ICD-10 (Please refer to page 122 for list of ICD-10 codes used). 4. All rates are age-adjusted per 100,000 residents using the 2000 US standard population. 5. The title of this cause of death has changed between ICD-10 and ICD-9. Chronic Lower Respiratory Disease (ICD-10 title) corresponds to Chronic Obstructive Pulmonary Disease (COPD) (ICD-9 title). 6. Unintentional injuries such as falls, fires, and drownings that were not intended to occur. Motor-vehicle-related injuries and other transportation-related injuries are not included in these numbers. 7. The Census 2000 count for Hispanics 65+ years is lower than the number previously estimated. Thus, the death rate (the number of deaths divided by the population) is increased relative to past calculations.

Figure C-4

Percent Distribution of Leading Causes of Death<sup>1</sup>  
Massachusetts: 2000



<sup>1</sup> Total Number of Deaths = 56,591  
Causes of Death are classified according to ICD-10

Table C-5A. Number and Age-Specific Rates for Selected Causes of Death by Race and Hispanic Ethnicity, Massachusetts: 2000

Selected Causes <sup>2</sup>	Total			White, non-Hispanic <sup>1</sup>			Black, non-Hispanic <sup>1</sup>			Asian/Pacific Islander, non-Hispanic <sup>1</sup>			Hispanic		
	#	Rate <sup>3</sup>	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#
<b>Age: 1-14, TOTAL</b>	<b>181</b>	<b>15.3</b>													
Cancer	31	2.6	24	2.6	2	-- <sup>5</sup>									
Unintentional non-transport Injuries <sup>4</sup>	29	2.5	18	2.0	5	6.1									
Motor Vehicle-related Injuries	16	1.4	12	1.3	2	-- <sup>5</sup>									
Heart Disease	15	1.3	11	1.2	3	-- <sup>5</sup>									
<b>Age: 15-24, TOTAL</b>	<b>403</b>	<b>49.1</b>													
Motor Vehicle-related Injuries	121	14.8	89	14.0	8	14.7									
Suicide	53	6.5	41	6.5	4	-- <sup>5</sup>									
Injuries of Undetermined Intent <sup>6</sup>	51	6.2	43	6.8	2	-- <sup>5</sup>									
Homicide	45	5.5	11	1.7	21	38.5									
<b>Age: 25-44, TOTAL</b>	<b>2,375</b>	<b>119.4</b>													
Cancer	456	22.9	391	23.9	33	29.8									
Heart Disease	329	16.5	265	16.2	29	26.2									
Injuries of Undetermined Intent <sup>6</sup>	285	14.3	238	14.5	19	17.2									
Suicide	178	8.9	155	9.5	8	7.2									
<b>Age: 45-64, TOTAL</b>	<b>7,841</b>	<b>552.3</b>													
Cancer	3,108	218.9	2,800	221.5	193	320.4									
Heart Disease	1,699	119.7	1,498	118.5	131	217.5									
Chronic Lower Respiratory Disease <sup>7</sup>	267	18.8	246	19.5	10	16.6									
Diabetes	245	17.3	203	16.1	21	34.9									
<b>Age: 65+, TOTAL<sup>8</sup></b>	<b>45,413</b>	<b>5,279.6</b>													
Heart Disease	13,235	1,538.7	12,771	1,578.6	303	1,294.9									
Cancer	10,376	1,206.3	9,909	1,224.9	304	1,299.1									
Stroke	3,371	391.9	3,194	394.8	98	418.8									
Chronic Lower Respiratory Disease <sup>7</sup>	2,619	304.5	2,549	315.1	38	162.4									

1. Race and ethnicity data in this table are presented as mutually exclusive categories. Persons of Hispanic ethnicity are not included in a race category. 2. Deaths are coded according to ICD-10. Please see page 122 for a list of ICD-10 codes used in this table. 3. Number of deaths per 100,000 persons in each age group. 4. Unintentional non-transport injuries include injuries such as falls, fires, and drownings that were not intended to occur. Motor vehicle-related injuries and other transportation-related injuries are not included in these numbers. 5. Calculations based on fewer than five events are excluded. 6. Injuries of undetermined intent include deaths from falls, fires, drownings, and drug overdoses, where the investigation has not determined whether the injuries were accidental or purposely inflicted. 7. The title of this cause of death has changed between ICD-10 and ICD-9. Chronic Lower Respiratory Disease (ICD-10 title) corresponds to Chronic Obstructive Pulmonary Disease (COPD) (ICD-9 title). 8. Please see Table 5B for causes of death for detailed age groups for persons ages 65+ years. 9. The Census 2000 count for Hispanics 65+ years is lower than the number previously estimated. Thus, the death rate (the number of deaths divided by the population) is increased relative to past calculations.

**Table C-5B. Number and Age-Specific Rates for Selected Causes of Death Among the Oldest Age Groups by Race and Hispanic Ethnicity, Massachusetts: 2000**

Selected Causes <sup>2</sup>	Total			White, non-Hispanic <sup>1</sup>			Black, non-Hispanic <sup>1</sup>			Asian/Pacific Islander, non-Hispanic <sup>1</sup>			Hispanic		
	#	Rate <sup>3</sup>	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#
<b>Age: 65-74, TOTAL</b>	<b>9,746</b>	<b>2,278.0</b>		<b>9,077</b>	<b>2,289.5</b>	<b>402</b>	<b>2,943.8</b>	<b>92</b>	<b>1,094.1</b>	<b>166</b>	<b>1,883.2</b>				
Cancer	3,639	850.6		3,418	862.1	144	1,054.5	35	416.2	39	442.4				
Heart Disease	2,341	547.2		2,181	550.1	99	725.0	20	237.8	40	453.8				
Chronic Lower Respiratory Disease <sup>4</sup>	674	157.5		654	165.0	9	65.9	2	-- <sup>5</sup>	9	102.1				
Stroke	438	102.4		388	97.9	28	205.0	10	118.9	11	124.8				
<b>Age: 75-84, TOTAL</b>	<b>17,554</b>	<b>5,561.4</b>		<b>16,851</b>	<b>5,608.7</b>	<b>450</b>	<b>6,065.5</b>	<b>100</b>	<b>2,704.9</b>	<b>143</b>	<b>3,766.1</b>				
Heart Disease	4,826	1,529.0		4,654	1,549.1	117	1,577.0	22	595.1	27	711.1				
Cancer	4,493	1,423.5		4,313	1,435.6	120	1,617.5	25	676.2	33	869.1				
Stroke	1,254	397.3		1,182	393.4	41	552.6	14	378.7	16	421.4				
Chronic Lower Respiratory Disease <sup>4</sup>	1,171	371.0		1,140	379.4	17	229.1	5	135.2	9	237.0				
<b>Age: 85+, TOTAL</b>	<b>18,113</b>	<b>15,522.1</b>		<b>17,612</b>	<b>15,711.4</b>	<b>324</b>	<b>13,935.5</b>	<b>85</b>	<b>8,534.1</b>	<b>87</b>	<b>7,304.8</b>				
Heart Disease	6,068	5,200.0		5,936	5,295.4	87	3,741.9	20	2,008.0	22	1,847.2				
Cancer	2,244	1,923.0		2,178	1,943.0	40	1,720.4	10	1,004.0	16	1,343.4				
Stroke	1,679	1,438.8		1,624	1,448.7	29	1,247.3	15	1,506.0	10	839.6				
Influenza and Pneumonia	1,161	994.9		1,134	1,011.6	20	860.2	2	-- <sup>5</sup>	5	419.8				

1. Race and ethnicity data in this table are presented as mutually exclusive categories. Persons of Hispanic ethnicity are not included in a race category. Please see Table A1 in the Appendix for death data by race according to Federal definitions, which include persons of Hispanic ethnicity in a race category. Please refer to the Technical Notes in the Appendix for a more detailed explanation. 2. Deaths are coded according to ICD-10. Please see page 122 for a list of ICD-10 codes used in this table. 3. Number of deaths per 100,000 persons in each age group. 4. The title of this cause of death has changed between ICD-10 and ICD-9. Chronic Lower Respiratory Disease (ICD-10 title) corresponds to Chronic Obstructive Pulmonary Disease (COPD) (ICD-9 title). 5. Calculations based on fewer than five events are excluded.

**Table C-6. Heart Disease and Cancer Deaths by Race and Gender,  
Comparability Unmodified and Comparability Modified Age-Adjusted Rates,<sup>1</sup> Massachusetts: 1990, 1995-2000**

**Heart Disease**

Year	White, non-Hispanic <sup>2</sup>			Black, non-Hispanic <sup>2</sup>		
	Male		Total	Male		Total
	Comparability Unmodified <sup>3</sup>	Comparability Modified <sup>4</sup>	Comparability Modified <sup>4</sup>	Comparability Unmodified <sup>3</sup>	Comparability Modified <sup>4</sup>	Comparability Modified <sup>4</sup>
1990	357.4	NA <sup>5</sup>	281.2	398.4	NA	294.0
1995	338.0	333.2	205.9	333.4	328.7	282.5
1996	337.0	332.2	204.1	340.0	335.2	281.2
1997	323.5	318.9	199.4	356.3	351.2	291.3
1998	300.0	295.7	184.0	357.2	352.1	282.8
1999 <sup>6</sup>	289.8 <sup>7</sup>	178.4 <sup>7</sup>	224.3 <sup>7</sup>	296.5 <sup>7</sup>	211.5 <sup>7</sup>	248.0 <sup>7</sup>
2000 <sup>6</sup>	284.1 <sup>7</sup>	174.8 <sup>7</sup>	220.0 <sup>7</sup>	249.8 <sup>7</sup>	215.6 <sup>7</sup>	235.4 <sup>7</sup>

Year	Asian/Pacific Islander, non-Hispanic <sup>2</sup>			Hispanic		
	Male		Total	Male		Total
	Comparability Unmodified <sup>3</sup>	Comparability Modified <sup>4</sup>	Comparability Modified <sup>4</sup>	Comparability Unmodified <sup>3</sup>	Comparability Modified <sup>4</sup>	Comparability Modified <sup>4</sup>
1990	111.6	NA <sup>5</sup>	100.8	100.2	NA	88.2
1995	120.8	119.1	105.8	130.9	129.0	101.8
1996	153.9	151.7	115.2	135.9	134.0	101.1
1997	150.4	148.3	105.1	132.7	130.8	99.6
1998	150.6	148.5	121.0	114.0	112.4	91.3
1999 <sup>6</sup>	119.6 <sup>7</sup>	73.7 <sup>7</sup>	94.7 <sup>7</sup>	143.4 <sup>7</sup>	83.5 <sup>7</sup>	108.2 <sup>7</sup>
2000 <sup>6</sup>	116.6 <sup>7</sup>	68.0 <sup>7</sup>	89.1 <sup>7</sup>	124.4 <sup>7,8</sup>	108.4 <sup>7,8</sup>	117.8 <sup>7,8</sup>

1. Rates are per 100,000 age-adjusted to the 2000 US standard population. 2. Race and ethnicity data in this table are presented as mutually exclusive categories. Persons of Hispanic ethnicity are not included in a race category. 3. Comparability unmodified rate: this rate has not been modified. 4. Comparability modified rate: this rate has been adjusted using the preliminary comparability ratio (CR) provided by the NCHS (February 2001). 5. NA: comparability ratio is not applicable for years prior to 1994. 6. 1999 and 2000 are coded according to ICD-10. 7. When comparing data over time between 1994 through 2000, please use the comparability modified rate for years 1994-1998. 8. The Census 2000 count for Hispanics 65+ years is lower than the number previously estimated. Thus, the death rate (the number of deaths divided by the population) is increased relative to past calculations.



**Table C-6 (continued). Heart Disease and Cancer Deaths by Race and Gender,  
Comparability Unmodified and Comparability Modified Age-Adjusted Rates,<sup>1</sup> Massachusetts: 1990, 1995-2000**

**Cancer**

Year	White, non-Hispanic <sup>2</sup>			Black, non-Hispanic <sup>2</sup>		
	Male	Female	Total	Male	Female	Total
	Comparability Unmodified <sup>3</sup>	Comparability Modified <sup>4</sup>	Comparability Unmodified	Comparability Unmodified	Comparability Modified	Comparability Modified
1990	273.9	NA <sup>5</sup>	220.5	308.1	NA	233.4
1995	286.1	288.0	226.5	394.0	396.7	303.8
1996	283.8	285.7	222.5	361.6	364.1	291.9
1997	269.5	271.3	216.9	396.2	398.9	297.1
1998	264.1	265.9	210.0	380.2	382.8	280.1
1999 <sup>6</sup>	263.4 <sup>7</sup>	174.3 <sup>7</sup>	207.7 <sup>7</sup>	337.2 <sup>7</sup>	195.7 <sup>7</sup>	251.5 <sup>7</sup>
2000 <sup>6</sup>	259.5 <sup>7</sup>	178.9 <sup>7</sup>	209.1 <sup>7</sup>	369.4 <sup>7</sup>	177.7 <sup>7</sup>	252.3 <sup>7</sup>

Year	Asian/Pacific Islander, non-Hispanic <sup>2</sup>			Hispanic		
	Male	Female	Total	Male	Female	Total
	Comparability Unmodified <sup>3</sup>	Comparability Modified <sup>4</sup>	Comparability Unmodified	Comparability Unmodified	Comparability Modified	Comparability Modified
1990	126.3	NA	96.3	64.7	NA	57.3
1995	198.6	200.0	179.2	121.5	122.3	99.4
1996	192.7	194.0	172.6	136.5	137.4	90.0
1997	185.1	186.4	156.7	107.7	108.4	75.8
1998	143.5	144.5	120.2	160.2	161.3	117.2
1999 <sup>6</sup>	162.8 <sup>7</sup>	116.9 <sup>7</sup>	136.7 <sup>7</sup>	141.8 <sup>7</sup>	92.5 <sup>7</sup>	113.8 <sup>7</sup>
2000 <sup>6</sup>	109.5 <sup>7</sup>	95.7 <sup>7</sup>	103.2 <sup>7</sup>	155.0 <sup>7a</sup>	106.2 <sup>7a</sup>	126.0 <sup>7a</sup>

1. Rates are per 100,000 age-adjusted to the 2000 US standard population. 2. Race and ethnicity data in this table are presented as mutually exclusive categories. Persons of Hispanic ethnicity are not included in a race category. 3. Comparability unmodified rate; this rate has not been modified. 4. Comparability modified rate; this rate has been adjusted using the preliminary comparability ratio (OR) provided by the NCHS (February 2001). 5. NA: comparability ratio is not applicable for years prior to 1994. 6. 1999 and 2000 are coded according to ICD-10. 7. When comparing data over time between 1994 through 2000, please use the comparability modified rate for years 1994-1998. The Census 2000 count for Hispanics 65+ years is lower than the number previously estimated. Thus, the death rate (the number of deaths divided by the population) is increased relative to past calculations.



**Table C-7. Number and Age-Adjusted Rates of Cancer Deaths by Selected Causes and Gender, Massachusetts: 2000**

Cause of Death <sup>1</sup>	ICD-10 Code	Total		Female		Male	
		#	Rate <sup>2,3</sup>	#	Rate	#	Rate
<b>Total Cancer Deaths</b>	<b>C00-C97</b>	<b>14,006</b>	<b>206.9</b>	<b>7,021</b>	<b>175.7</b>	<b>6,985</b>	<b>258.3</b>
Bladder	C67	328	4.8	120	2.8	208	8.0
Brain and nervous system	C70-C72	309	4.7	137	3.7	172	5.9
Cervix	C53	72	2.0	72	2.0	0	0.0
Colorectal	C18-C21	1,511	22.0	761	18.0	750	28.2
Esophagus	C15	352	5.3	80	2.0	272	9.7
Female breast	C50 <sup>5</sup>	1,055	27.0	1,055	27.0	0	0.0
Hodgkin's disease	C81	22	0.3	15	0.4	7	0.2
Kidney and other urinary organs	C64, C65	281	4.2	98	2.4	183	6.6
Leukemia	C91-C95	504	7.5	230	5.7	274	10.0
Lung	C33, C34	3,763	56.2	1,733	44.5	2,030	73.5
Melanoma of the skin	C43	227	3.4	94	2.5	133	4.7
Multiple myeloma	C88, C90	243	3.6	126	3.1	117	4.4
Non-Hodgkin's lymphoma	C82-C85	509	7.5	269	6.6	240	8.8
Ovary	C56	352	9.1	352	9.1	0	0.0
Pancreas	C25	794	11.7	437	10.7	357	12.9
Prostate	C61	765	31.0	0	0.0	765	31.0
Stomach	C16	376	5.5	142	3.3	234	8.8
Uterus	C54, C55	176	4.5	176	4.5	0	0.0
All other cancers	Residual	2,367	34.9	1,124	27.4	1,243	45.4

1. Common terms are used to describe the causes of cancer deaths. For detailed terminology of cancer sites, please refer to ICD-10 code on page 122.

2. All rates are age-adjusted by the direct method using the 2000 US standard population. Rates are per 100,000 population. 3. The total resident population is used to calculate all "Total Rates" except for ICD-10 C50, C53-C56, which are based on the total female population, and ICD-10 C61, which is based on the total male population. 4. Calculations based on fewer than five events are excluded. 5. Includes only female breast cancer.

**Table C-8. Selected Causes of Cancer Deaths by Age, Massachusetts: 2000**

Age	Cause of death <sup>1</sup>	ICD-10 Code	Number	Age-specific rate <sup>2</sup>
1-14 years	<b>TOTAL</b>		<b>31</b>	<b>2.6</b>
	Brain and nervous system	C70-C72	12	1.0
	Leukemia	C91-C95	9	0.8
	Kidney and other urinary organs	C64, C65	1	.. <sup>3</sup>
	Non-Hodgkin's lymphoma	C82-C85	1	.. <sup>3</sup>
15 - 24 years	<b>TOTAL</b>		<b>31</b>	<b>3.8</b>
	Brain and nervous system	C70-C72	5	0.6
	Non-Hodgkin's lymphoma	C82-C85	4	.. <sup>3</sup>
	Melanoma of the skin	C43	3	.. <sup>3</sup>
	Leukemia	C91-C95	3	.. <sup>3</sup>
25 - 44 years	<b>TOTAL</b>		<b>456</b>	<b>22.9</b>
	Lung	C33, C34	67	3.4
	Female breast <sup>4</sup>	C50	62	6.1
	Brain and nervous system	C70-C72	37	1.9
	Colorectal	C18-C21	31	1.6
45 - 64 years	<b>TOTAL</b>		<b>3,108</b>	<b>218.9</b>
	Lung	C33, C34	933	65.7
	Female breast <sup>4</sup>	C50	314	42.7
	Colorectal	C18-C21	265	18.7
	Pancreas	C25	174	12.3
65 + years	<b>TOTAL</b>		<b>10,376</b>	<b>1,206.3</b>
	Lung	C33, C34	2,761	321.0
	Colorectal	C18-C21	1,214	141.1
	Prostate <sup>5</sup>	C61	712	208.5
	Female breast <sup>4</sup>	C50	679	130.9
65-74 years	<b>TOTAL</b>		<b>3,639</b>	<b>850.6</b>
	Lung	C33, C34	1,203	281.2
	Colorectal	C18-C21	334	78.1
	Female breast <sup>4</sup>	C50	213	89.7
	Pancreas	C25	206	48.1
75-84 years	<b>TOTAL</b>		<b>4,493</b>	<b>1,423.5</b>
	Lung	C33, C34	1,184	375.1
	Colorectal	C18-C21	540	171.1
	Prostate <sup>5</sup>	C61	332	276.0
	Pancreas	C25	278	88.1
85+ years	<b>TOTAL</b>		<b>2,244</b>	<b>1,923.0</b>
	Lung	C33, C34	374	320.5
	Colorectal	C18-C21	340	291.4
	Prostate <sup>5</sup>	C61	236	762.6
	Female breast <sup>4</sup>	C50	207	241.4

1. Common terms are used to describe causes of cancer death. For detailed terminology, please refer to the ICD-10 codes listed on page 122. 2. Number of deaths per 100,000 residents in each age group. 3. Calculations based on fewer than five events are excluded. 4. Calculation based on female population in specified age group. 5. Calculation based on male population in specified age group.

Table C-9. Leading Causes of Cancer Deaths and Age-Adjusted Rates by Race & Hispanic Ethnicity, Massachusetts: 2000

Cause <sup>2</sup>	White, non-Hispanic <sup>1</sup>		Black, non-Hispanic <sup>1</sup>		Asian/Pacific Islander, non-Hispanic <sup>1</sup>			Hispanic	
	#	Rate <sup>3</sup>	Cause	#	Rate	Cause	#	Rate	#
Lung	3,575	57.5	Lung	134	62.1	Lung	25	21.1	29
Colorectal	1,439	22.4	Colorectal	48	24.3	Leukemia	10	8.6	17
Female breast	988	27.3	Female breast	42	31.6	Female breast	9	12.2	16
Pancreas	746	11.8	Prostate	42	64.8	Colorectal	8	7.3	14
Prostate	714	30.7	Pancreas	34	15.5	Pancreas	7	5.8	10
Total Cancer	13,154	209.1	Total Cancer	535	252.3	Total Cancer	125	103.2	185
									126.0

1. Race and ethnicity data in this table are presented as mutually exclusive categories. Persons of Hispanic ethnicity are not included in a race category. 2. ICD-10 codes used. Please refer to the ICD-10 codes listing in the page 122 for detailed terminology. 3. All rates are age-adjusted by the direct method using the 2000 US standard population. Rates are per 100,000 population.

**Table C-10A. Injury Deaths by Gender, Age, Race and Hispanic Ethnicity:  
Numbers, Age-Adjusted, and Age-Specific Rates, Massachusetts: 2000**

Cause of Death <sup>1</sup>	All Injuries		Motor Vehicle <sup>2</sup>		Suicide		Homicide		Other Injuries <sup>3</sup>	
	# <sup>4</sup>	Rate <sup>5</sup>	#	Rate	#	Rate	#	Rate	#	Rate
<b>All Persons</b>	<b>2,386</b>	<b>36.1</b>	<b>490</b>	<b>7.6</b>	<b>401</b>	<b>6.2</b>	<b>125</b>	<b>2.0</b>	<b>1,370</b>	<b>20.3</b>
<1	8	10.1	0	0.0	0	0.0	2	-- <sup>6</sup>	6	7.6
1-14	54	4.6	16	1.4	3	-- <sup>6</sup>	4	-- <sup>6</sup>	31	2.6
15-24	283	34.5	121	14.8	53	6.5	45	5.5	64	7.8
25-44	763	38.3	137	6.9	178	8.9	60	3.0	388	19.5
45-64	497	35.0	110	7.7	123	8.7	12	0.8	252	17.7
65+	781	90.8	106	12.3	44	5.4	2	-- <sup>6</sup>	629	73.1
65-74	167	39.0	40	9.3	18	4.2	2	-- <sup>6</sup>	107	25.0
75-84	297	94.1	53	16.8	20	6.3	0	0.0	224	71.0
85+	317	271.7	13	11.1	6	5.1	0	0.0	298	255.4
<b>All Females</b>	<b>853</b>	<b>22.4</b>	<b>158</b>	<b>4.6</b>	<b>106</b>	<b>3.2</b>	<b>37</b>	<b>1.1</b>	<b>552</b>	<b>13.5</b>
<1	4	-- <sup>6</sup>	0	0.0	0	0.0	0	0.0	4	-- <sup>6</sup>
1-14	20	3.5	5	0.9	1	-- <sup>6</sup>	2	-- <sup>6</sup>	12	2.1
15-24	68	16.6	34	8.3	8	1.9	5	1.2	21	5.1
25-44	209	20.7	34	3.4	50	4.9	24	2.4	101	10.0
45-64	146	19.9	38	5.2	39	5.3	4	-- <sup>6</sup>	65	8.8
65+	406	78.3	47	9.1	8	1.5	2	-- <sup>6</sup>	349	67.3
65-74	64	26.9	11	4.6	4	-- <sup>6</sup>	2	-- <sup>6</sup>	47	19.8
75-84	145	74.2	31	15.9	4	-- <sup>6</sup>	0	0.0	110	56.3
85+	197	229.8	5	5.8	0	0.0	0	0.0	192	223.9
<b>All Males</b>	<b>1,533</b>	<b>52.1</b>	<b>332</b>	<b>11.0</b>	<b>295</b>	<b>9.6</b>	<b>88</b>	<b>2.8</b>	<b>818</b>	<b>28.6</b>
<1	4	-- <sup>6</sup>	0	0.0	0	0.0	2	-- <sup>6</sup>	2	-- <sup>6</sup>
1-14	34	5.6	11	1.8	2	-- <sup>6</sup>	2	-- <sup>6</sup>	19	3.1
15-24	215	52.5	87	21.3	45	11.0	40	9.8	43	10.5
25-44	554	56.6	103	10.5	128	13.1	36	3.7	287	29.3
45-64	351	51.3	72	10.5	84	12.3	8	1.2	187	27.3
65+	375	109.8	59	17.3	36	10.5	0	0.0	280	82.0
65-74	103	54.1	29	15.2	14	7.4	0	0.0	60	31.5
75-84	152	126.4	22	18.3	16	13.3	0	0.0	114	94.8
85+	120	387.7	8	25.8	6	19.4	0	0.0	106	342.5

1. Data presented in this table are classified according to ICD-10. Please refer to page 122 for list of ICD-10 codes used in this table. 2. Motor vehicle deaths to occupants, pedestrians, motorcyclists and bicyclists. 3. Other Injuries include deaths such as drownings, fires, falls and drug overdoses. This category includes deaths from unintentional injuries and injuries of undetermined intent (deaths where investigation has not determined whether the injuries were accidental or purposely inflicted). 4. Column sum may not equal total because age or race of some decedents was not known. 5. Number of deaths per 100,000 persons in each age group; rates for all rows except the age group rows are age-adjusted to the 2000 US standard population. 6. Calculations based on fewer than five events are excluded. 7. Race categories presented in this report differ from previously published data. Race and ethnicity data in this table are presented as mutually exclusive categories; persons of Hispanic ethnicity are not included in a race category.

**Table C-10A. (continued) Injury Deaths by Gender, Age, Race and Hispanic Ethnicity:  
Numbers, Age-Adjusted, and Age-Specific Rates, Massachusetts: 2000**

Cause of Death <sup>1</sup>	All Injuries		Motor Vehicle <sup>2</sup>		Suicide		Homicide		Other Injuries <sup>3</sup>	
	# <sup>4</sup>	Rate <sup>5</sup>	#	Rate	#	Rate	#	Rate	#	Rate
<b>Race/Gender<sup>7</sup></b>										
<b>White, non-Hispanic</b>	2,041	35.2	406	7.4	357	6.5	53	1.0	1,225	20.3
Females	757	22.2	134	4.5	93	3.3	23	0.8	507	13.6
Males	1,284	50.6	272	10.7	264	10.1	30	1.2	718	28.6
<b>Black, non-Hispanic</b>	149	47.3	24	7.4	17	4.9	39	10.1	69	24.8
Females	45	28.2	6	3.6	5	2.6	6	3.4	28	18.6
Males	104	68.3	18	11.4	12	7.4	33	17.0	41	32.6
<b>Asian, non-Hispanic</b>	47	23.7	20	8.1	5	3.0	6	1.9	16	10.8
Females	18	18.5	8	6.9	2	-- <sup>6</sup>	1	-- <sup>6</sup>	7	9.3
Males	29	29.2	12	9.3	3	-- <sup>6</sup>	5	3.5	9	11.9
<b>Hispanics</b>	147	36.9	39	10.1	22	4.4	27	5.3	59	17.1
Females	33	16.5	10	5.5	6	3.1	7	2.7	10	5.2
Males	114	59.9	29	14.8	16	5.5	20	8.0	49	31.5

1. Data presented in this table are classified according to ICD-10. Please refer to page 122 for list of ICD-10 codes used in this table. 2. Motor vehicle deaths to occupants, pedestrians, motorcyclists and bicyclists. 3. Other Injuries include deaths such as drownings, fires, falls and drug overdoses. This category includes deaths from unintentional injuries and injuries of undetermined intent (deaths where investigation has not determined whether the injuries were accidental or purposely inflicted). 4. Column sum may not equal total because age or race of some decedents was not known. 5. Number of deaths per 100,000 persons in each age group; rates for all rows except the age group rows are age-adjusted to the 2000 US standard population. 6. Calculations based on fewer than five events are excluded. 7. Race and ethnicity data in this table are presented as mutually exclusive categories. Persons of Hispanic ethnicity are not included in a race category.

Table C-10B. Type of Injury<sup>1</sup> Deaths by Gender: Number and Age-Adjusted Rates<sup>2</sup>, Massachusetts: 2000

Type of Injury	All		Female		Male	
	Number	Rate	Number	Rate	Number	Rate
<b>Suicide</b>	401	6.2	106	3.2	295	9.6
Poisoning	101	1.5	57	1.7	44	1.4
Hanging, strangulation or suffocation	135	2.1	24	0.7	111	3.6
Firearm	103	1.6	9	0.3	94	3.1
Other and unspecified	62	1.0	16	0.5	46	1.5
<b>Homicide</b>	125	2.0	37	1.1	88	2.8
Firearm	67	1.1	13	0.4	54	1.7
Cut or pierce	29	0.5	9	0.3	20	0.7
Other and unspecified	29	0.4	15	0.4	14	0.4
<b>Unintentional Injuries (Accidents)</b>	1,361	20.3	568	13.9	793	28.3
Falls	200	2.9	87	2.0	113	4.4
Hanging, strangulation or suffocation	125	1.8	60	1.4	65	2.5
Drowning or submersion	42	0.7	12	0.4	30	1.0
Smoke, fire and flames	59	0.9	24	0.7	35	1.2
Poisoning	47	0.7	11	0.3	36	1.2
Firearm	3	-- <sup>3</sup>	1	-- <sup>3</sup>	2	-- <sup>3</sup>
Motor Vehicle-Related	490	7.6	158	4.6	332	11.0
Injury to pedestrian	79	1.2	23	0.6	56	1.9
Injury to pedal cyclist	8	0.1	0	0.0	8	0.3
Injury to motorcyclist	31	0.5	2	-- <sup>3</sup>	29	0.9
Injury to occupant	80	1.3	29	0.8	51	1.7
Other and unspecified	292	4.6	104	3.1	188	6.2
Other and unspecified	395	5.6	215	4.6	180	7.0
<b>Events of Undetermined Intent</b>	466	7.2	127	3.8	339	10.6
Poisoning	438	6.7	116	3.5	322	10.1
Drowning or submersion	10	0.2	2	-- <sup>3</sup>	8	0.3
Other and unspecified	18	0.3	9	0.3	9	0.3
<b>Legal Intervention</b>	1	-- <sup>3</sup>	0	0.0	1	-- <sup>3</sup>
Firearm	1	-- <sup>3</sup>	0	0.0	1	-- <sup>3</sup>
<b>Adverse Effects</b>	32	0.5	15	0.4	17	0.7
Drugs	3	-- <sup>3</sup>	0	0.0	3	-- <sup>3</sup>
Medical Care	29	0.4	15	0.4	14	0.5
<b>ALL INJURIES</b>	2,386	36.1	853	22.4	1,533	52.1

1. Data presented in this table are classified according to ICD-10. Please refer to page 122 for list of ICD-10 codes used in this table. 2. Number of deaths per 100,000 persons; rates are adjusted to the 2000 US standard population. 3. Calculations based on fewer than five events are excluded.

**Table C-10C. Type of Injury<sup>1</sup> Deaths by Manner / Intent Categories: Number and Age-Adjusted Rates<sup>2</sup>,  
Massachusetts: 2000**

Manner	Intent																
	ALL Total			Unintentional Accidents			Suicide			Intentional Homicide			Undetermined			Other <sup>3</sup> Legal Intervention	
	Total Number	Rate	Total Number	Rate	Total Number	Rate	Total Number	Rate	Total Number	Rate	Total Number	Rate	Total Number	Rate	Total Number	Rate	
Poisoning	586	9.0	47	0.7	101	1.5	0	0.0	0	0.0	438	6.7	0	0.0	0	0.0	
Transport Injuries																	
Motor Vehicle-Related	490	7.6	490	7.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Injury to pedestrian	79	1.2	79	1.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Injury to pedal cyclist	8	0.1	8	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Injury to motorcyclist	31	0.5	31	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Injury to occupant	80	1.3	80	1.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Other and unspecified	292	4.6	292	4.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Other transport	29	0.4	29	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Hanging, strangulation or suffocation	268	4.1	125	1.8	135	2.1	7	0.1	1	-- <sup>4</sup>	1	-- <sup>4</sup>	0	0.0	0	0.0	
Falls	222	3.2	200	2.9	21	0.3	0	0.0	1	-- <sup>4</sup>	1	-- <sup>4</sup>	0	0.0	0	0.0	
Firearm	175	2.7	3	-- <sup>4</sup>	103	1.6	67	1.1	1	-- <sup>4</sup>	1	-- <sup>4</sup>	1	-- <sup>4</sup>	1	-- <sup>4</sup>	
Drowning and submersion	60	0.9	42	0.7	8	0.1	0	0.0	10	0.2	0	0.0	0	0.0	0	0.0	
Smoke, fire and flames	60	0.9	59	0.9	0	0.0	0	0.0	1	-- <sup>4</sup>	0	0.0	0	0.0	0	0.0	
Cut or pierce	39	0.6	0	0.0	9	0.1	29	0.5	1	-- <sup>4</sup>	0	0.0	0	0.0	0	0.0	
Other and unspecified	425	6.1	366	5.2	24	0.4	22	0.3	13	0.2	0	0.0	0	0.0	0	0.0	
Adverse Effects	32	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
ALL INJURIES	2,386	36.1	1,361	20.3	401	6.2	125	2.0	466	7.2	1	-- <sup>4</sup>					

1. Data presented in this table are classified according to ICD-10. Please refer to page 122 for list of ICD-10 codes used in this table. 2. Number of deaths per 100,000; rates are adjusted to the 2000 US standard population. 3. Includes legal intervention and operations of war. 4. Calculations based on fewer than five events are excluded.

Table C-11A. HIV/AIDS<sup>1</sup> Deaths by Place of Occurrence, Massachusetts: 1988-2000

Year	Total		Place of Occurrence								Hospice/Nursing Home/Other	
			At Home		Hospital		Out-of-State					
	Comparability Unmodified	Comparability Modified <sup>2</sup>	Comparability Unmodified	Comparability Modified <sup>2</sup>	Comparability Unmodified	Comparability Modified <sup>2</sup>	Comparability Unmodified	Comparability Modified <sup>2</sup>	Comparability Unmodified	Comparability Modified <sup>2</sup>	Comparability Unmodified	Comparability Modified <sup>2</sup>
1988	# 315	NA	67	NA	234	NA	7	NA	7	NA	7	NA
	% 100.0		21.3		74.3		2.2		2.2		2.2	
1989	# 404	NA	79	NA	313	NA	7	NA	5	NA	5	NA
	% 100.0		19.6		77.5		1.7		1.2		1.2	
1990	# 447	NA	90	NA	284	NA	9	NA	64	NA	64	NA
	% 100.0		20.1		63.5		2.1		14.3		14.3	
1991	# 632	NA	159	NA	338	NA	4	NA	131	NA	131	NA
	% 100.0		25.2		53.5		-		20.7		20.7	
1992	# 701	NA	171	NA	394	NA	14	NA	122	NA	122	NA
	% 100.0		24.4		56.2		2.0		17.4		17.4	
1993	# 777	NA	218	NA	413	NA	14	NA	127	NA	127	NA
	% 100.0		28.1		53.2		1.8		16.3		16.3	
1994	# 938	998	265	282	514	547	13	14	142	151	142	151
	% 100.0		28.3	28.3	54.8	54.8	1.4	1.4	15.1	15.1	15.1	15.1
1995	# 937	997	303	322	500	532	7	7	127	135	127	135
	% 100.0		32.3	32.3	53.4	53.4	0.7	0.7	13.6	13.5	13.6	13.5
1996	# 609	648	154	164	336	357	9	10	110	117	110	117
	% 100.0		25.3	25.3	55.2	55.1	1.5	1.5	18.1	18.1	18.1	18.1
1997	# 242	277	59	68	158	181	4	5	21	24	21	24
	% 100.0		24.4	24.5	65.3	65.3	-	1.8	8.6	8.7	8.6	8.7
1998	# 213	244	46	53	130	149	2	2	35	40	35	40
	% 100.0		21.6	21.7	61.0	61.1	-	-	16.4	16.4	16.4	16.4
1999	# 242 <sup>4</sup>		55 <sup>4</sup>		142 <sup>4</sup>		2 <sup>4</sup>		43 <sup>4</sup>		43 <sup>4</sup>	
	% 100.0		22.7		58.7		-		17.8		17.8	
2000	# 226 <sup>4</sup>		48 <sup>4</sup>		145 <sup>4</sup>		0 <sup>4</sup>		33 <sup>4</sup>		33 <sup>4</sup>	
	% 100.0		21.2		64.2		0.0		14.6		14.6	

**\*\*PLEASE NOTE:** this table has been updated June 2001 to reflect the revised comparability ratio of HIV Disease Deaths, issued by the National Center for Health Statistics. 1. AIDS. Acquired Immune Deficiency Syndrome. HIV. Human Immunodeficiency Virus. The deaths reported are cases for which AIDS or HIV-related disease was the underlying cause of death. Deaths for 1987-1998 were coded according to the ICD-9 classification schedule, which began with 1987 death data (codes 042.0-044). Deaths for 1999 and 2000 were coded according to the ICD-10 (codes B20-B24). 2. Comparability Modified (CM): this number has been adjusted using the preliminary comparability ratio (CR) from NCHS (revised June 2001). CM data for 1994-1998 use 1998 based CR; CM data for 1987-1998 use revised 1998 based CR. 3. NA: Comparability ratio is not applicable for years prior to 1994. 4. When comparing data over time between 1994 through 2000, please use the comparability modified number for years 1994-1998.



Table C-11B. HIV/AIDS' Deaths by Age, Massachusetts: 1988-2000

Year	Age (in years)											
	<15			15-24			25-34			35-44		
	Comparability Unmodified	Comparability Modified <sup>2</sup>	Comparability Unmodified	Comparability Unmodified	Comparability Modified <sup>2</sup>	Comparability Unmodified	Comparability Unmodified	Comparability Modified <sup>2</sup>	Comparability Unmodified	Comparability Modified <sup>2</sup>	Comparability Unmodified	Comparability Modified <sup>2</sup>
1988	#	5	NA	12	NA	111	NA	NA	127	NA	60	NA
	%	1.6		3.8		35.2			40.3		19.1	
1989	#	3	NA	16	NA	146	NA	NA	167	NA	72	NA
	%	-		4.0		36.1			41.3		17.8	
1990	#	3	NA	4	NA	147	NA	NA	197	NA	96	NA
	%	-		-		32.8			44.1		21.5	
1991	#	9	NA	19	NA	214	NA	NA	298	NA	92	NA
	%	1.4		3.0		33.8			47.2		14.6	
1992	#	6	NA	5	NA	243	NA	NA	304	NA	143	NA
	%	0.8		0.7		34.7			43.4		20.4	
1993	#	10	NA	5	NA	234	NA	NA	359	NA	169	NA
	%	1.3		0.6		30.1			46.2		21.8	
1994	#	7	7	8	9	272	289	289	464	494	187	199
	%	0.7	0.7	0.9	0.9	29.0	29.0	29.0	49.5	49.5	19.9	19.9
1995	#	11	12	5	5	272	289	289	443	471	206	219
	%	1.2	1.2	0.5	0.5	29.0	29.0	29.0	47.3	47.2	22.0	22.0
1996	#	4	4	8	9	154	164	164	300	319	143	152
	%	0.7	0.6	1.3	1.4	25.3	25.3	25.3	49.3	49.2	23.5	23.5
1997	#	5	6	1	1	35	40	40	135	155	66	76
	%	2.1	2.2	-	-	14.5	14.4	14.4	55.8	56.0	27.3	27.4
1998	#	0	0	0	0	47	54	54	106	121	60	69
	%	0.0	0.0	0.0	0.0	22.1	22.1	22.1	49.8	50.0	28.2	28.3
1999	#	2 <sup>4</sup>		9 <sup>4</sup>		34 <sup>4</sup>			112 <sup>4</sup>		85 <sup>4</sup>	
	%	-		3.7		14.0			46.3		35.1	
2000	#	4 <sup>4</sup>		0 <sup>4</sup>		26 <sup>4</sup>			104 <sup>4</sup>		92 <sup>4</sup>	
	%	-		0.0 <sup>4</sup>		11.5 <sup>4</sup>			46.0 <sup>4</sup>		40.7 <sup>4</sup>	

PLEASE NOTE: This table has been updated June 2001 to reflect the revised comparability ratio of HIV Disease Deaths, issued by the National Center for Health Statistics. 1. AIDS: Acquired Immune Deficiency Syndrome. HIV: Human Immunodeficiency Virus. The deaths reported are cases for which AIDS or HIV-related disease was the underlying cause of death. Deaths for 1987-1998 were coded according to the ICD-9 classification schedule, which began with 1987 death data (codes 042-044). Deaths for 1999 and 2000 were coded according to the ICD-10 (codes B20-B24). 2. Comparability Modified (CM): this number has been adjusted using the preliminary comparability ratio (CR) from NCHS (revised June 2001). CM data for 1994-1996 use 1996 based CR; CM data for 1997-1998 use revised 1996 based CR. 3. NA: Comparability ratio is not applicable for years prior to 1994. 4. When comparing data over time between 1994 through 2000, please use the comparability modified number for years 1994-1998.

Table C-11C. HIV/AIDS<sup>1</sup> Deaths by Gender and Race/Ethnicity, Massachusetts: 1988-2000

Year	Gender			Race and Ethnicity							
	Male		Female	White, non-Hispanic <sup>2</sup>				Black, non-Hispanic <sup>2</sup>			
	Comparability Unmodified	Comparability Modified <sup>4</sup>		Comparability Unmodified	Comparability Modified <sup>4</sup>	Comparability Unmodified	Comparability Modified <sup>4</sup>	Comparability Unmodified	Comparability Modified <sup>4</sup>	Comparability Unmodified	Comparability Modified <sup>4</sup>
1988	#	281	NA	NA	NA	NA	NA	NA	NA	NA	NA
	%	89.2	10.8								
1989	#	359	NA	290	NA	76	NA	18.8	NA	37	NA
	%	88.9	11.1	71.8						9.2	
1990	#	390	NA	301	NA	94	1	21.1	NA	50	NA
	%	87.2	12.8	67.5			-			11.2	
1991	#	535	NA	439	NA	118	0	18.7	NA	74	NA
	%	84.6	15.4	69.5			0.0			11.7	
1992	#	605	NA	463	NA	141	2	20.1	NA	95	NA
	%	86.3	13.7	66.0			-			13.6	
1993	#	663	NA	518	NA	160	5	20.6	NA	94	NA
	%	85.3	14.7	66.7			0.6			12.1	
1994	#	763	812	175	186	193	7	205	20.5	157	167
	%	81.3	81.4	18.7	18.6	20.6	0.7	20.5		16.7	16.7
1995	#	753	801	184	196	223	5	237	23.8	155	165
	%	80.4	80.3	19.6	19.7	59.1	0.5	23.8		16.5	16.5
1996	#	494	525	115	122	341	5	171	17.1	101	107
	%	81.1	81.0	18.9	18.8	56.0	0.8	26.4	26.4	16.6	16.5
1997	#	190	218	52	60	121	0	74	85	47	54
	%	78.5	78.7	21.5	21.7	50.0	0.0	30.6	30.7	19.4	19.5
1998	#	169	193	44	50	104	0	51	58	58	66
	%	79.3	79.1	20.7	20.5	48.8	0.0	23.9	23.8	27.2	27.0
1999	#	177 <sup>6</sup>	65 <sup>5</sup>	126 <sup>6</sup>		51 <sup>6</sup>	2 <sup>6</sup>			63 <sup>6</sup>	
	%	73.1	26.9	52.1		21.1	-			26.0	
2000	#	161 <sup>6</sup>	65 <sup>5</sup>	104 <sup>6</sup>		61 <sup>6</sup>	2 <sup>6</sup>			59 <sup>6</sup>	
	%	71.2	28.8	46.0		27.0	-			26.1	

\*\*PLEASE NOTE: this table has been updated June 2001 to reflect the revised comparability ratio of HIV Disease Deaths, issued by the National Center for Health Statistics. 1. AIDS: Acquired Immune Deficiency Syndrome, HIV: Human Immunodeficiency Virus. The deaths reported are cases for which AIDS or HIV-related disease was the underlying cause of death. Deaths for 1987-1998 were coded according to the ICD-9 classification schedule, which began with 1987 death data (codes 042-044). Deaths for 1999 and 2000 were coded according to the ICD-10 (codes 820-824). 2. Race and ethnicity data in this table are presented as mutually exclusive categories. Persons of Hispanic ethnicity are not included in a race category. 3. The "Other" category represents Asian/Pacific Islander, non-Hispanics, American Indian or Alaska Natives, non-Hispanics, and Other. 4. Comparability Modified: this number has been adjusted using the preliminary comparability ratio (CR) from NCHS (June 2001). CM data for 1994-1995 use 1996 based CR; CM data for 1997-1998 use revised 1998 based CR. 5. NA=not available. 6. When comparing data over time between 1994 through 2000, please use the comparability modified number for years 1994-1998.

White, non-Hispanic <sup>2</sup>	Black, non-Hispanic <sup>2</sup>	Hispanic
----------------------------------	----------------------------------	----------

TOTAL												
Year	#	Rate <sup>3</sup>	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
	Comparability Unmodified		Comparability Modified <sup>4</sup>		Comparability Unmodified		Comparability Modified <sup>4</sup>		Comparability Unmodified		Comparability Modified <sup>4</sup>	
1990	230	13.0	NA	NA	73	76.5	NA	NA	40	42.4	NA	NA
1991	357	20.1	NA	NA	99	102.9	NA	NA	55	55.6	NA	NA
1992	362	20.5	NA	NA	105	111.0	NA	NA	79	78.3	NA	NA
1993	391	22.3	NA	NA	122	130.4	NA	NA	76	73.0	NA	NA
1994	451	25.6	480	27.2	152	162.0	162	172.3	127	118.3	135	125.8
1995	428	24.3	455	25.8	159	169.7	169	180.5	124	113.0	132	120.2
1996	251	14.2	267	15.1	113	121.1	120	128.8	85	75.4	90	80.2
1997	86	4.9	98	5.6	48	51.3	55	58.7	36	31.1	41	35.6
1998	68	3.9	78	4.5	38	40.7	44	46.6	47	39.8	54	45.6
1999		74 <sup>6</sup>	4.4			32 <sup>6</sup>	31.2			40 <sup>6</sup>	30.5	
2000		60 <sup>6</sup>	3.7			28 <sup>6</sup>	25.3			40 <sup>6</sup>	27.9	
MALE												
1990	212	24.3	NA	NA	50	107.2	NA	NA	36	77.2	NA	NA
1991	322	36.7	NA	NA	71	150.7	NA	NA	39	79.5	NA	NA
1992	328	37.6	NA	NA	79	170.0	NA	NA	64	127.7	NA	NA
1993	350	40.3	NA	NA	91	197.6	NA	NA	57	110.3	NA	NA
1994	388	44.5	413	47.3	113	244.3	120	259.9	93	174.2	99	185.3
1995	367	42.1	390	44.8	112	242.2	119	257.6	90	164.5	96	175.0
1996	221	25.3	235	26.9	73	158.1	78	168.2	61	108.5	65	115.4
1997	71	8.1	81	9.3	30	64.6	34	74.0	28	48.5	32	55.5
1998	57	6.6	65	7.6	27	58.2	31	66.6	34	57.7	39	66.1
1999		54 <sup>6</sup>	6.5			20 <sup>6</sup>	39.9			30 <sup>6</sup>	46.2	
2000		39 <sup>6</sup>	4.8			17 <sup>6</sup>	31.9			27 <sup>6</sup>	28.4	
FEMALE												
1990	18	2.0	NA	NA	23	47.1	NA	NA	4	-- <sup>5</sup>	NA	NA
1991	35	3.9	NA	NA	28	57.1	NA	NA	16	32.0	NA	NA
1992	34	3.8	NA	NA	26	54.0	NA	NA	15	29.5	NA	NA
1993	41	4.6	NA	NA	31	65.2	NA	NA	19	36.3	NA	NA
1994	63	7.1	67	7.6	39	82.0	41	87.2	34	63.0	36	67.0
1995	61	6.9	65	7.3	47	99.0	50	105.3	34	61.8	36	65.7
1996	30	3.4	32	3.6	40	84.9	43	90.3	24	42.4	26	45.1
1997	15	1.7	17	1.9	18	38.2	21	43.7	8	13.8	9	15.8
1998	11	1.3	13	1.5	11	23.4	13	26.8	13	22.0	15	25.2
1999		20 <sup>6</sup>	2.3			12 <sup>6</sup>	22.9			10 <sup>5</sup>	15.1	
2000		21 <sup>6</sup>	2.5			11 <sup>6</sup>	19.2			13 <sup>6</sup>	17.8	

1. AIDS and HIV disease deaths for years 1989-1998 coded using ICD-9: 042-044, 1999 and 2000 deaths coded using ICD-10: B20-B24. 2. Race and ethnicity data in this table are presented as mutually exclusive categories. Persons of Hispanic ethnicity are not included in a race category. 3. Number of deaths per 100,000 residents in the specified population group. 4. Comparability Modified (CM) number and rate based on preliminary comparability ratios (CR) from NCHS (June 2001). CM data for 1994-1996 use 1996 based CR, CM data for 1997-1998 use revised 1998 based CR. 5. NA= not applicable. 6. When comparing data over time between 1994 through 2000, please use comparability modified data for years 1994-1998.

Table C-13A. Medical Examiner Certified Deaths by Cause, Race, Sex, and Age, Massachusetts Occurrence: 2000

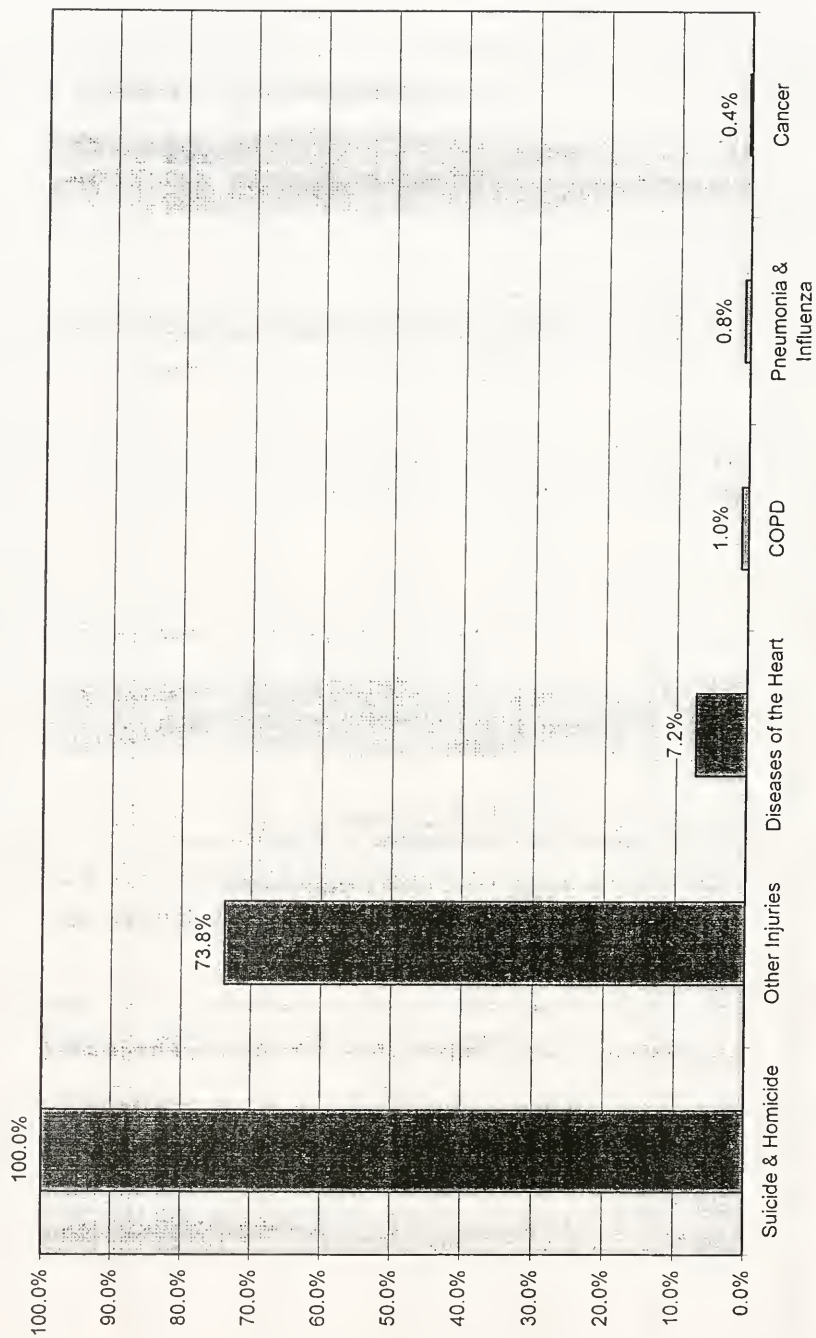
Age	Race/Sex	Total Deaths Certified by Medical Examiner	Motor Vehicle Injuries (V01-V99)	Suicide (X80-X84)	Homicide (X85-X98, Y00-Y09)	Legal Intervention/ Undeter. Injury (Y10-Y36)	All Other Injuries (STW:00-99, X00-X59)	Non-Violent Causes (A-O, R00-R94)	Ill Defined & Unknown Causes (R95-R99)
Total	White M	2224	288	263	30	258	213	1006	166
	F	1027	147	88	23	89	121	462	97
	Black M	194	16	14	32	18	17	78	19
	F	83	5	3	5	8	6	46	10
	Other M	150	27	15	23	20	10	39	16
	F	62	14	9	6	4	7	17	5
<1	White M	21	0	0	1	0	2	5	13
	F	11	0	0	0	0	0	3	8
	Black M	3	0	0	0	0	0	1	2
	F	8	0	0	0	0	3	0	5
	Other M	5	0	0	0	0	0	1	4
	F	4	0	0	0	0	0	1	3
1-14	White M	34	11	2	2	0	11	6	2
	F	16	7	1	1	0	4	1	2
	Black M	7	1	0	0	0	3	2	1
	F	3	1	0	0	0	1	1	0
	Other M	5	1	0	0	0	3	1	0
	F	5	0	0	0	0	3	1	1
15-19	White M	69	37	15	3	6	0	5	3
	F	28	15	2	0	3	1	4	3
	Black M	13	1	1	6	1	1	1	2
	F	3	1	1	0	0	1	0	0
	Other M	15	6	2	5	0	1	0	1
	F	7	4	1	1	0	0	2	0
20-29	White M	215	50	42	9	51	15	22	26
	F	82	19	11	3	19	4	14	12
	Black M	36	4	4	19	5	0	3	1
	F	8	0	1	3	0	0	0	0
	Other M	44	12	6	11	5	1	6	3
	F	7	5	1	0	1	0	0	0
30-39	White M	356	54	61	6	74	21	97	43
	F	139	17	18	11	29	4	35	25
	Black M	29	3	4	7	3	1	7	4
	F	15	1	1	0	4	1	6	2
	Other M	39	3	4	5	9	2	11	5
	F	15	2	2	3	3	2	2	1

Table C-13A. Medical Examiner Certified Deaths by Cause, Race, Sex, and Age, Massachusetts Occurrence: 2000

Age	Race/Sex	Total Deaths Certified by Medical Examiner		Motor Vehicle Injuries (V01-V99)	Suicide (X60-X84)	Homicide (X85-X99, Y00-Y09)	Legal Intervention/Undeter. Injury (Y10-Y36)	All Other Injuries (STW:00-99, X00-X59)	Non-Violent Causes (A-Q, R00-R94)	Ill Defined & Unknown Causes (R95-R99)
		556	170	38	59	4	102	37	254	62
40-49	White M	327	170	14	25	5	31	13	55	27
	F	112	46	2	3	0	8	6	20	7
	Black M	23	19	1	0	1	3	0	11	3
	Other M	8	20	4	1	2	4	1	7	1
50-59	White M	327	170	14	25	5	31	13	55	27
	F	112	46	2	3	0	8	6	20	7
	Black M	23	19	1	0	1	3	0	11	3
	Other M	8	20	4	1	2	4	1	7	1
60-69	White M	327	170	14	25	5	31	13	55	27
	F	112	46	2	3	0	8	6	20	7
	Black M	23	19	1	0	1	3	0	11	3
	Other M	8	20	4	1	2	4	1	7	1
70-79	White M	327	170	14	25	5	31	13	55	27
	F	112	46	2	3	0	8	6	20	7
	Black M	23	19	1	0	1	3	0	11	3
	Other M	8	20	4	1	2	4	1	7	1
80+	White M	327	170	14	25	5	31	13	55	27
	F	112	46	2	3	0	8	6	20	7
	Black M	23	19	1	0	1	3	0	11	3
	Other M	8	20	4	1	2	4	1	7	1

\* Does not include 13 deaths of unknown status.

Figure C-5. Proportion of Deaths Certified by Medical Examiner for Selected Causes of Death, Massachusetts Occurrence Deaths: 2000





**Table C-13B. Medical Examiner Certified Deaths by County,  
Massachusetts Occurrence: 2000**

County		Population	Occurrence Deaths	M.E. Certified	Referred-Not Certified by M.E.	Natural Cause Deaths Certified By M.E.
Total	#	6,349,098	57,510	3,753	9,343	1,652
	%	100.00%	100.00%	6.53%	16.25%	44.02%
	Rank	-	-	-	-	-
Barnstable	#	222,230	2,621	145	364	67
	%	3.50%	4.46%	5.53%	13.89%	46.21%
	Rank	9	9	12	10	8
Berkshire	#	134,953	1,641	98	260	46
	%	2.13%	2.80%	5.97%	15.84%	46.94%
	Rank	11	10	8	7	5
Bristol	#	534,678	4,787	312	723	145
	%	8.42%	8.15%	6.52%	15.10%	46.47%
	Rank	6	7	7	8	7
Dukes	#	14,987	102	11	11	2
	%	0.24%	0.17%	10.78%	10.78%	18.18%
	Rank	13	13	1	13	13
Essex	#	723,419	6,143	363	816	156
	%	11.39%	10.46%	5.91%	13.28%	42.98%
	Rank	3	4	9	11	9
Franklin	#	71,535	543	52	66	31
	%	1.13%	0.92%	9.58%	12.15%	59.62%
	Rank	12	12	2	12	1
Hampden	#	456,228	5,067	331	939	142
	%	7.19%	8.63%	6.53%	18.53%	42.90%
	Rank	8	6	6	1	10
Hampshire	#	152,251	1,094	64	177	30
	%	2.40%	1.86%	5.85%	16.18%	46.88%
	Rank	10	11	10	5	6
Middlesex	#	1,465,396	11,184	591	1,798	290
	%	23.08%	19.05%	5.28%	16.08%	49.07%
	Rank	1	1	13	6	4
Nantucket	#	9,520	49	0	1	0
	%	0.15%	0.08%	0.00%	2.04%	-
	Rank	14	14	14	14	-
Norfolk	#	650,308	5,220	300	783	160
	%	10.24%	8.89%	5.75%	15.00%	53.33%
	Rank	5	5	11	9	2
Plymouth	#	472,822	3,454	247	561	131
	%	7.45%	5.88%	7.15%	16.24%	53.04%
	Rank	7	8	4	4	3
Suffolk	#	689,807	8,640	750	1,587	295
	%	10.86%	14.72%	8.68%	18.37%	39.33%
	Rank	4	2	3	2	11
Worcester	#	750,963	6,965	489	1,257	157
	%	11.83%	11.86%	7.02%	18.05%	32.11%
	Rank	2	3	5	3	12

The percentages and ranks in the Medical Examiner Certified Deaths column and the Referred column are based on totals in the Occurrence Deaths column. The percentages and ranks of natural cause of death are based on total number of medical examiner certified deaths for each county. Total population based on sum of county estimates.

Table C-14A. Selected Causes of Death by Community, 2000

COMMUNITY	Total Deaths	Age-adjusted Death Rate <sup>1</sup>	Heart Disease	Total Cancer	Lung Cancer	Female Breast Cancer <sup>2</sup>	Stroke	Chronic Lower Respiratory Disease <sup>3</sup>	Diabetes	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide
<b>Massachusetts</b>	<b>56,591</b>	<b>816.5</b>	<b>15,313</b>	<b>14,006</b>	<b>3,763</b>	<b>1,055</b>	<b>3,645</b>	<b>2,911</b>	<b>1,353</b>	<b>2,110</b>	<b>490</b>	<b>125</b>	<b>401</b>
Abington	146	988.0	44	35	5	2	4	9	3	2	3	0	0
Acton	89	666.2	17	22	5	3	14	3	2	3	1	0	1
Acushnet	87	765.1	20	33	13	3	3	2	2	2	1	0	1
Adams	106	739.7	32	19	5	3	15	5	0	7	0	0	1
Agawam	314	791.7	85	67	25	3	18	17	8	15	1	0	3
Alford	6	1,225.1	1	1	1	0	0	0	2	0	0	0	0
Amesbury	143	877.6	42	32	12	2	9	9	7	5	1	1	3
Amherst	149	717.9	30	33	8	3	17	10	3	3	1	0	1
Andover	236	712.2	66	53	10	8	10	8	5	7	2	0	4
Arlington	471	821.0	121	108	22	7	35	22	7	27	2	0	3
Ashburnham	39	1,030.4	13	14	4	0	1	3	1	0	0	0	0
Ashby	17	768.7	4	5	1	0	3	0	0	1	1	0	0
Ashfield	12	677.9	1	3	1	0	1	1	0	1	1	0	0
Ashland	87	815.0	23	21	4	2	5	5	2	1	5	0	1
Athol	146	919.5	41	35	6	1	12	3	4	6	1	0	0
Attleboro	348	801.9	109	91	25	9	21	17	13	8	1	2	4
Auburn	170	755.1	48	41	12	3	7	13	3	9	1	1	0
Avon	51	971.6	13	9	4	1	1	3	1	1	3	0	1
Ayer	87	1,233.2	27	26	10	1	3	2	2	4	0	0	0
Barnstable	535	763.5	148	154	41	16	27	32	9	14	5	0	1
Barre	31	600.9	6	7	2	0	1	2	2	0	1	0	0
Becket	7	423.3	5	1	0	0	0	1	0	0	0	0	0
Bedford	124	653.5	22	31	7	2	10	5	2	8	0	0	0
Belchertown	102	1,145.2	22	33	11	3	6	3	5	1	1	0	2
Bellingham	94	908.9	25	24	4	1	3	7	4	4	0	0	0
Belmont	237	691.3	63	65	10	6	21	6	3	15	0	0	2
Berkley	18	613.5	6	8	1	1	1	0	0	0	1	0	0
Berlin	13	639.0	5	3	0	1	0	0	0	0	0	0	0
Barnardston	22	793.7	7	5	1	0	2	1	1	2	0	0	0
Beverly	433	845.0	107	83	27	5	40	32	12	18	4	2	3
Billerica	249	957.8	62	69	26	4	17	10	2	10	1	0	0
Blackstone	51	714.5	15	10	3	0	3	1	2	5	1	0	1
Blandford	8	977.2	3	1	0	0	0	2	0	1	0	0	0
Bolton	8	448.5	1	2	0	0	0	2	0	0	0	0	0
Boston	4,500	889.3	1,096	1,109	284	83	270	181	98	163	30	42	34



Table C-14A. (continued) Selected Causes of Death by Community, 2000

COMMUNITY	Total Deaths	Age-adjusted Death Rate <sup>1</sup>	Heart Disease	Total Cancer	Lung Cancer	Female Breast Cancer <sup>2</sup>	Stroke	Chronic Lower Respiratory Disease <sup>3</sup>	Diabetes	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide
Bourne	232	964.7	75	48	10	3	15	19	3	6	2	0	1
Boxborough	13	774.3	2	4	1	0	0	1	0	1	0	0	0
Boxford	31	638.8	3	9	2	0	4	3	3	2	1	0	0
Boylston	29	851.5	7	10	4	2	0	3	0	0	0	0	0
Braintree	401	831.0	112	98	30	8	23	16	11	14	5	0	1
Brewster	146	679.2	28	34	13	5	8	6	5	6	0	1	0
Bridgewater	148	844.2	39	43	7	4	10	10	5	6	1	0	0
Brimfield	29	959.7	11	7	2	1	2	1	0	1	0	0	0
Brockton	899	982.0	263	198	61	15	47	50	19	29	12	3	6
Brookfield	20	618.0	6	7	3	0	0	1	2	0	0	0	0
Brookline	397	610.8	99	107	22	9	30	17	6	15	4	0	2
Buckland	17	773.3	4	3	2	0	0	4	0	0	0	0	0
Burlington	150	715.4	39	40	12	2	9	8	10	3	1	0	0
Cambridge	643	827.0	171	155	37	10	38	33	16	19	2	0	7
Canton	236	770.5	58	54	14	4	18	14	5	12	2	0	3
Carlisle	10	345.6	1	3	0	0	1	0	0	0	0	0	0
Carver	89	729.1	22	28	11	0	5	4	5	1	3	0	0
Charlemont	7	516.7	4	0	0	0	1	0	0	0	1	0	0
Charlton	67	772.0	17	13	3	1	3	4	2	4	3	0	0
Chatham	120	678.0	33	33	5	1	5	3	2	6	0	0	1
Chelmsford	287	813.0	82	83	14	14	19	17	3	8	1	0	2
Chelsea	300	910.9	64	70	20	2	20	15	9	15	1	1	4
Cheshire	42	1,137.5	14	10	5	0	3	3	1	0	1	0	0
Chester	6	521.6	3	1	1	0	0	0	0	0	0	0	0
Chesterfield	5	655.6	0	4	1	0	0	0	0	1	0	0	0
Chicopee	658	930.6	199	148	33	8	39	41	14	30	7	0	4
Chilmark	4	-- <sup>4</sup>	0	2	1	0	0	0	0	1	0	0	0
Clarksburg	18	1,026.5	4	4	2	1	1	2	2	1	0	0	0
Clinton	141	894.1	43	30	7	3	9	8	3	6	2	0	1
Cohasset	75	883.7	18	18	6	1	4	2	2	4	0	0	0
Colrain	14	874.7	6	3	0	1	1	1	0	0	0	0	0
Concord	133	564.8	33	34	7	6	14	4	3	7	2	0	0
Conway	5	410.2	1	1	0	0	0	0	0	0	0	0	0
Cummington	8	987.0	3	0	0	0	0	0	0	0	0	0	0
Dalton	67	778.5	18	20	8	1	2	2	3	2	0	0	1
Danvers	286	828.9	90	49	16	4	26	21	4	10	1	0	2
Dartmouth	277	737.8	86	74	18	6	16	22	3	9	1	0	2

Table C-14A. (continued) Selected Causes of Death by Community, 2000

COMMUNITY	Total Deaths	Age-adjusted Death Rate <sup>1</sup>	Heart Disease	Total Cancer	Lung Cancer	Female Breast Cancer <sup>2</sup>	Stroke	Chronic Lower Respiratory Disease <sup>3</sup>	Diabetes	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide
Dedham	280	933.4	68	82	25	6	17	14	5	9	0	0	5
Deerfield	53	1,051.7	16	12	3	1	3	1	2	3	1	0	0
Dennis	217	710.1	48	61	16	4	15	11	4	3	3	1	0
Dighton	63	997.6	14	20	10	2	3	3	0	3	3	0	0
Douglas	29	611.4	5	12	4	0	0	2	1	2	0	0	1
Dover	25	575.2	6	9	2	2	0	1	0	0	0	0	0
Dracut	216	896.4	68	66	20	5	12	8	4	9	1	0	1
Dudley	72	721.2	16	23	4	2	5	4	1	1	1	0	3
Dunstable	5	275.9	1	2	1	0	1	0	0	0	1	0	0
Duxbury	115	752.7	24	31	12	1	10	9	0	2	1	0	1
East Bridgewater	96	860.1	26	26	8	1	3	2	0	1	3	0	4
East Brookfield	19	836.4	4	7	4	1	1	3	2	0	0	0	3
East Longmeadow	188	897.1	37	48	9	3	14	8	2	9	2	0	3
Eastham	56	712.7	19	18	1	1	6	1	1	3	0	0	0
Easthampton	159	887.7	50	40	10	3	15	5	6	8	1	0	1
Easton	148	876.0	43	42	12	5	7	4	2	6	1	0	2
Edgartown	22	612.4	7	9	2	1	0	0	0	0	0	0	0
Egremont	7	345.4	0	2	0	0	2	0	0	0	0	0	0
Erving	18	1,121.1	4	8	3	0	0	1	0	1	0	0	0
Essex	27	783.2	8	8	3	0	0	1	0	1	0	0	0
Everett	377	891.7	110	96	24	9	17	24	6	14	1	1	5
Fairhaven	227	882.2	87	49	12	6	12	19	3	6	0	1	0
Fall River	1,159	950.0	332	278	78	15	95	60	19	50	9	0	3
Falmouth	393	748.3	105	93	26	6	34	30	12	10	4	1	3
Fitchburg	389	861.7	102	78	23	5	44	24	11	17	6	2	6
Florida	6	1,238.8	2	1	0	0	1	0	0	0	0	0	0
Foxborough	125	869.1	36	33	5	3	11	7	2	4	5	0	1
Framingham	565	778.7	154	133	34	8	28	21	14	29	11	2	4
Franklin	155	796.1	47	38	10	3	10	7	4	4	1	0	1
Freetown	52	851.3	18	12	4	2	2	3	2	4	0	0	0
Gardner	231	861.8	61	54	15	3	11	15	8	11	1	1	5
Gay Head (Aquinnah)	3	-- <sup>4</sup>	1	1	0	0	0	0	0	0	0	0	0
Georgetown	40	714.9	10	15	7	1	1	2	0	1	1	0	0
Gill	14	934.4	5	5	1	0	1	1	0	0	0	0	0
Gloucester	302	824.9	94	86	24	6	18	20	8	4	1	0	2
Goshen	4	--	2	1	0	0	0	0	0	0	0	0	0

Table C-14A. (continued) Selected Causes of Death by Community, 2000

COMMUNITY	Total Deaths	Age-adjusted Death Rate <sup>1</sup>	Heart Disease	Total Cancer	Lung Cancer	Female Breast Cancer <sup>2</sup>	Stroke	Chronic Lower Respiratory Disease <sup>3</sup>	Diabetes	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide
Gosnold	1	-- <sup>4</sup>	0	0	0	0	0	1	0	0	0	0	0
Grafton	105	792.5	25	28	8	0	9	10	4	5	3	0	0
Granby	42	822.5	12	10	1	0	3	2	2	1	0	0	0
Granville	12	1,414.9	5	3	1	0	0	0	0	1	0	0	0
Great Barrington	106	870.3	25	24	5	2	5	4	3	2	1	0	0
Greenfield	228	827.6	65	44	12	3	28	15	4	9	2	0	4
Groton	40	737.5	15	11	3	0	1	2	0	1	2	0	0
Groveland	32	669.9	4	15	6	2	2	2	1	0	0	0	0
Hadley	65	898.9	10	18	5	2	8	1	2	1	2	0	1
Hallfax	53	697.7	12	16	4	0	4	3	2	2	1	0	0
Hamilton	40	621.4	11	9	1	0	4	1	2	3	0	0	1
Hampden	37	671.4	10	9	3	1	3	1	0	4	0	0	0
Hancock	7	828.4	1	3	3	0	0	3	0	0	0	0	0
Hanover	96	882.8	28	33	13	1	3	4	4	4	0	0	0
Hanson	59	920.6	15	22	6	3	3	2	1	3	0	0	2
Hardwick	28	966.2	4	7	2	0	3	1	1	0	1	0	0
Harvard	36	856.9	9	10	1	1	2	3	0	0	0	0	2
Harwich	183	632.4	47	45	9	3	12	8	9	3	0	0	0
Hatfield	35	846.2	11	8	3	0	5	2	2	1	1	0	0
Hatfield	570	898.9	160	128	35	11	38	27	18	18	6	2	6
Haverhill	3	-- <sup>4</sup>	1	1	0	0	0	0	0	0	0	0	0
Heath	10	1,915.8	2	4	0	0	0	1	1	0	0	0	0
Hingham	174	742.5	51	34	5	0	9	7	3	7	0	0	0
Hinsdale	9	589.3	1	2	1	1	0	0	0	1	0	0	1
Holbrook	114	938.4	32	35	6	3	2	6	2	3	2	0	0
Holden	118	658.8	32	39	10	8	6	5	2	3	1	1	0
Holland	10	704.8	2	3	0	0	0	0	0	2	0	0	0
Holliston	72	813.6	20	21	7	3	5	6	2	0	1	0	0
Holyoke	522	1,034.3	140	99	35	9	48	38	18	15	3	3	3
Hopedale	56	745.7	7	18	6	1	4	1	1	1	1	0	1
Hopkinton	64	823.0	16	16	2	0	7	6	0	4	0	0	0
Hubbardston	20	973.6	5	5	1	0	2	0	0	0	1	0	0
Hudson	126	755.1	40	32	8	3	5	5	4	6	4	0	2
Hull	72	712.9	18	21	11	0	4	4	1	3	0	0	0

Table C-14A. (continued) Selected Causes of Death by Community, 2000

COMMUNITY	Total Deaths	Age-adjusted Death Rate <sup>1</sup>	Heart Disease	Total Cancer	Lung Cancer	Female Breast Cancer <sup>2</sup>	Stroke	Chronic Lower Respiratory Disease <sup>3</sup>	Diabetes	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide
Huntington	11	651.1	1	0	0	0	3	2	0	1	0	0	0
Ipswich	116	704.1	28	35	9	7	12	4	5	3	1	0	0
Kingston	105	750.4	38	21	7	1	10	3	0	6	4	0	0
Lakeville	76	780.4	16	20	6	2	6	3	2	2	0	4	1
Lancaster	65	1,024.5	12	17	5	3	7	3	2	1	1	0	0
Lanesborough	13	491.1	4	2	1	0	0	4	1	0	0	0	0
Lawrence	546	880.9	152	117	28	9	31	23	20	17	7	4	6
Lee	73	972.1	11	21	7	3	4	5	3	4	0	0	0
Leicester	91	868.1	24	25	6	2	3	13	4	1	0	0	0
Lenox	82	785.6	22	22	6	0	5	7	2	2	1	0	1
Leominster	389	877.2	82	97	30	8	43	30	9	15	3	0	4
Leverett	16	1,150.8	6	3	0	0	0	1	1	0	0	0	1
Lexington	303	603.6	64	75	24	10	26	18	6	13	2	1	0
Leyden	0	0.0	0	0	0	0	0	0	0	0	0	0	0
Lincoln	24	422.9	3	9	0	0	3	1	0	1	1	0	0
Littleton	74	904.2	18	19	4	0	2	6	2	6	1	0	1
Longmeadow	200	802.1	53	44	7	3	16	10	2	7	0	0	1
Lowell	911	991.5	261	207	53	18	44	71	18	34	15	5	5
Ludlow	158	682.1	39	47	12	2	13	6	4	1	2	0	0
Lunenburg	70	815.6	16	25	7	1	3	3	1	1	1	0	1
Lynn	848	940.2	226	214	66	15	46	40	25	31	5	4	9
Lynnfield	88	617.7	24	20	6	2	11	1	3	1	1	1	1
Malden	525	857.4	145	129	39	13	33	24	18	22	6	1	2
Manchester	36	549.5	11	14	3	1	2	0	0	1	0	0	0
Mansfield	102	824.7	28	31	8	2	2	4	2	1	1	1	1
Marblehead	195	775.4	50	60	14	6	12	8	2	5	2	0	0
Marion	60	826.9	19	14	5	1	2	2	2	3	0	0	0
Marlborough	295	827.3	77	68	14	4	25	9	11	13	4	0	2
Marshfield	136	742.2	45	43	7	4	3	9	3	3	2	1	1
Mashpee	105	657.3	28	31	7	2	7	3	2	2	2	0	0
Mattapoisett	50	632.7	15	22	5	1	4	1	1	2	0	0	0
Maynard	80	755.0	23	25	8	2	4	1	2	1	1	0	0
Medfield	63	703.2	14	15	2	0	6	3	1	3	0	0	1
Medford	614	804.4	160	149	40	6	39	29	12	24	4	1	2
Medway	82	900.6	17	29	7	4	3	3	2	6	1	0	1
Melrose	285	759.1	86	68	15	5	21	15	8	16	0	1	0
Mendon	32	894.8	9	11	1	1	3	1	1	1	1	0	1

Table C-14A. (continued) Selected Causes of Death by Community, 2000

COMMUNITY	Total Deaths	Age-adjusted Death Rate <sup>1</sup>	Heart Disease	Total Cancer	Lung Cancer	Female Breast Cancer <sup>2</sup>	Stroke	Chronic Lower Respiratory Disease <sup>3</sup>	Diabetes	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide
Merrimac	41	793.8	8	14	4	2	0	4	1	4	1	0	0
Methuen	418	784.2	119	109	26	9	17	20	19	11	3	0	2
Middleborough	167	938.5	57	39	16	3	8	10	1	4	3	0	0
Middlefield	3	-- <sup>4</sup>	1	2	1	0	0	0	0	0	0	0	0
Middleton	34	589.6	5	16	9	0	0	1	1	1	0	0	1
Milford	237	805.9	78	53	14	4	15	6	7	10	2	0	1
Milbury	146	885.5	42	38	14	1	5	6	2	6	2	0	0
Mills	49	898.6	11	18	5	1	2	3	0	1	0	0	0
Milville	19	1,123.3	6	6	1	1	1	0	0	1	0	0	0
Milton	273	766.0	83	68	14	1	19	9	3	12	3	0	1
Monroe	0	0.0	0	0	0	0	0	0	0	0	0	0	0
Monson	79	1,063.7	19	23	4	2	1	6	2	2	1	0	0
Montague	107	1,025.8	35	16	4	0	6	6	2	9	1	0	0
Monterey	5	489.4	1	2	0	0	0	0	0	0	0	0	0
Montgomery	4	-- <sup>4</sup>	2	1	0	0	1	0	0	0	0	0	0
Mount Washington	0	0.0	0	0	0	0	0	0	0	0	0	0	0
Nahant	41	726.9	10	10	0	0	3	0	2	2	0	0	0
Nantucket	54	675.3	14	16	8	3	3	5	0	1	0	0	0
Natick	258	705.1	66	72	15	5	12	10	6	6	5	0	1
Needham	299	606.9	82	75	14	4	27	12	4	16	0	0	2
New Ashford	3	-- <sup>4</sup>	2	0	0	0	0	0	1	0	0	0	0
New Bedford	1,124	923.2	358	245	56	16	84	55	31	27	9	3	4
New Braintree	5	816.1	1	2	0	0	0	1	0	0	0	0	0
New Marlborough	14	882.8	4	2	0	0	3	1	0	0	0	0	0
New Salem	7	887.6	3	2	0	0	0	1	0	0	0	0	0
Newbury	38	670.7	14	13	4	2	2	1	1	0	0	0	0
Newburyport	180	865.4	51	48	14	5	16	14	6	6	0	0	0
Newton	632	583.9	156	161	34	13	45	27	12	30	5	0	2
Norfolk	35	774.7	5	8	2	1	0	5	0	2	2	0	0
North Adams	187	892.1	67	32	8	1	16	14	4	13	0	1	1
North Andover	220	655.2	68	49	12	4	20	14	2	6	0	0	1
North Attleboro	174	801.8	48	45	15	2	13	9	3	5	3	0	2
North Brookfield	40	893.9	20	9	4	1	4	2	2	0	0	0	0

Table C-14A. (continued) Selected Causes of Death by Community, 2000

COMMUNITY	Total Deaths	Age-adjusted Death Rate <sup>1</sup>	Heart Disease	Total Cancer	Lung Cancer	Female Breast Cancer <sup>2</sup>	Stroke	Chronic Lower Respiratory Disease <sup>3</sup>	Diabetes	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide
North Reading	87	792.8	24	20	9	4	5	1	2	3	2	0	2
Northampton	328	930.8	96	72	21	4	24	13	9	12	1	0	1
Northborough	73	737.3	26	17	3	3	4	3	0	3	0	0	1
Northbridge	152	945.4	34	33	8	1	8	11	5	10	1	0	1
Northfield	14	447.1	4	2	0	0	3	1	0	1	0	0	0
Norton	107	855.1	34	28	11	2	7	5	2	3	2	0	1
Norwell	77	677.9	23	16	3	1	5	3	6	4	0	0	0
Norwood	303	749.8	79	78	19	8	16	25	1	14	1	0	1
Oak Bluffs	39	953.6	16	11	5	1	3	0	1	0	0	0	1
Oakham	5	528.0	2	0	0	0	0	0	2	0	0	0	0
Orange	76	952.2	29	13	3	2	8	4	1	4	1	0	2
Orleans	78	497.2	19	25	6	2	4	2	1	5	1	0	1
Otis	8	647.1	1	2	0	0	2	4	0	0	1	0	0
Oxford	111	962.4	30	31	5	1	8	4	0	5	2	0	1
Palmer	121	784.9	39	20	6	2	8	9	5	5	2	0	0
Paxton	20	444.9	4	8	2	0	1	1	0	0	0	0	0
Peabody	483	776.5	136	122	29	6	40	27	12	19	5	0	1
Pelham	8	842.1	4	0	0	0	1	0	0	0	0	0	0
Pembroke	90	822.3	24	27	4	3	2	7	2	3	1	0	0
Pepperell	41	572.5	9	19	5	1	3	1	0	0	1	0	0
Peru	5	967.9	0	1	0	0	1	1	0	0	0	0	0
Petersham	9	553.0	2	1	0	0	2	0	1	1	0	0	0
Phillipston	7	837.5	2	0	0	0	0	0	0	0	0	0	0
Pittsfield	595	890.1	173	143	50	13	37	44	22	22	4	0	1
Plainfield	6	1,209.2	2	1	0	1	0	0	0	0	0	0	0
Plainville	38	513.8	14	11	0	0	3	1	0	0	0	0	0
Plymouth	438	851.1	135	91	22	3	18	23	12	19	3	2	6
Plympton	5	257.2	2	1	0	0	0	0	0	0	1	0	0
Princeton	12	550.2	1	4	1	0	2	0	0	2	0	0	0
Provincetown	57	1,111.6	14	14	0	2	0	5	3	0	0	0	0
Quincy	952	850.6	252	262	79	19	50	48	16	37	3	2	14
Randolph	310	890.1	91	94	26	4	12	17	4	15	2	0	0
Raynham	111	915.3	33	34	8	3	4	4	2	2	3	0	0
Reading	200	751.7	68	59	18	4	9	7	2	4	0	0	1
Rehoboth	55	677.5	13	14	4	0	2	3	1	0	1	0	0
Revere	486	812.5	130	141	41	10	25	22	9	14	5	1	1
Richmond	15	809.5	5	1	1	0	0	0	1	1	0	0	0
Rochester	29	887.8	9	9	3	0	0	1	1	2	1	0	0

Table C-14A. (continued) Selected Causes of Death by Community, 2000

COMMUNITY	Total Deaths	Age-adjusted Death Rate <sup>1</sup>	Heart Disease	Total Cancer	Lung Cancer	Female Breast Cancer <sup>2</sup>	Stroke	Chronic Lower Respiratory Disease <sup>3</sup>	Diabetes	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide
Rockland	168	956.3	48	52	14	3	7	6	5	4	2	0	0
Rockport	74	552.8	21	21	5	2	5	6	1	3	0	0	0
Rowe	2	---	1	0	0	0	0	0	0	0	0	0	0
Rowley	41	887.4	9	16	2	0	2	3	2	1	1	0	0
Royalston	9	804.9	2	5	3	0	0	0	1	0	0	0	0
Russell	5	448.1	2	1	0	0	0	0	0	1	0	0	0
Rutland	30	672.3	7	8	1	1	2	5	0	3	1	0	1
Salem	366	813.3	97	90	35	9	26	21	8	9	2	1	0
Salisbury	72	1,010.6	23	19	7	2	5	5	1	1	1	0	7
Sandisfield	8	664.0	2	1	0	0	0	2	0	0	0	0	2
Sandwich	161	751.3	48	46	16	3	13	7	0	2	1	0	0
Saugus	272	797.1	68	74	31	1	18	15	10	8	1	0	4
Savoy	6	948.7	2	1	0	0	1	0	0	0	0	0	4
Scituate	146	707.5	44	35	16	1	10	5	4	8	0	0	0
Seekonk	98	734.7	32	29	5	7	8	4	2	3	0	0	0
Sharon	107	686.4	31	27	10	3	4	4	3	10	2	0	0
Sheffield	22	568.6	4	7	0	0	2	0	1	2	1	0	0
Shelburne	22	556.7	2	3	0	0	3	1	1	3	0	0	0
Sherborn	12	333.7	6	0	0	0	0	1	0	0	0	0	0
Shirley	40	873.6	8	16	6	1	3	4	0	0	0	0	0
Shrewsbury	240	701.8	67	61	22	6	18	13	5	7	1	1	0
Shutesbury	8	826.1	4	2	1	0	0	0	0	1	0	0	0
Somerset	220	776.4	62	67	16	4	11	11	6	7	0	0	0
Somerville	578	884.3	162	139	41	9	34	24	11	21	5	0	3
South Hadley	177	765.0	52	41	11	5	13	9	4	9	0	0	1
Southampton	39	852.5	11	10	4	0	6	2	1	3	0	0	1
Southborough	38	757.4	20	7	2	1	2	2	2	0	2	0	0
Southbridge	191	908.0	73	40	12	5	5	6	9	10	1	0	3
Southwick	66	812.5	20	20	7	1	4	4	1	3	0	0	1
Spencer	87	796.6	24	16	4	0	6	6	5	2	1	0	1
Springfield	1,494	1,011.5	347	292	79	25	88	67	52	67	14	10	11
Sterling	34	666.8	8	7	1	0	4	1	1	1	1	0	1
Stockbridge	17	419.7	1	4	2	0	0	4	0	0	0	0	0
Stonham	254	776.2	73	66	15	5	21	12	4	12	1	1	1
Stoughton	235	735.8	60	63	17	6	10	8	7	13	3	0	3
Stow	32	828.2	8	7	1	0	2	4	0	0	2	0	0
Sturbridge	77	938.1	22	13	4	0	6	3	4	5	1	0	0
Sudbury	108	806.2	20	24	5	1	10	7	1	8	1	0	1

Table C-14A. (continued) Selected Causes of Death by Community, 2000

COMMUNITY	Total Deaths	Age-adjusted Death Rate <sup>1</sup>	Heart Disease	Total Cancer	Lung Cancer	Female Breast Cancer <sup>2</sup>	Stroke	Chronic Lower Respiratory Disease <sup>3</sup>	Diabetes	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide
Sunderland	15	538.9	6	1	0	0	0	0	0	0	1	0	0
Sutton	58	1,036.1	18	18	7	1	2	6	1	2	1	0	0
Swampscott	180	743.8	51	43	13	2	15	11	3	6	2	0	0
Swansea	125	663.4	32	33	10	0	7	4	6	5	3	0	0
Taunton	495	859.4	135	125	37	5	27	28	14	24	7	2	2
Templeton	68	980.5	16	18	6	1	4	4	0	2	1	0	0
Tewksbury	241	944.5	63	67	22	5	11	15	4	13	1	0	3
Tisbury	32	585.8	12	11	3	2	1	1	1	1	0	0	0
Tolland	2	-- <sup>4</sup>	0	0	0	0	0	1	0	1	0	0	0
Topsfield	55	789.6	13	14	4	2	3	1	0	2	0	0	0
Townsend	55	1,004.3	15	15	4	2	4	2	1	4	1	0	1
Truro	21	812.9	3	6	2	0	0	1	1	1	1	0	1
Tyngsborough	45	762.8	14	14	2	1	3	2	0	2	0	0	2
Tyringham	5	1,386.5	2	1	0	0	1	0	0	0	0	0	0
Upton	34	733.0	11	11	3	0	3	1	0	0	0	0	0
Uxbridge	90	1,015.2	24	25	9	3	8	4	4	1	1	0	0
Wakefield	248	795.3	70	60	17	4	17	15	4	8	1	0	1
Wales	10	675.2	1	5	2	0	1	1	0	0	0	0	0
Walpole	214	801.2	48	67	18	8	11	9	5	10	3	0	1
Waltham	509	824.9	112	128	30	8	46	24	18	19	3	1	1
Ware	110	960.1	29	39	8	5	4	2	3	2	0	0	1
Wareham	236	944.8	67	67	21	3	7	16	1	14	0	0	1
Warren	39	801.7	12	10	2	2	0	4	0	2	3	0	0
Warwick	4	-- <sup>4</sup>	2	0	0	0	0	0	1	0	0	0	0
Washington	2	-- <sup>4</sup>	0	1	0	0	0	0	0	0	0	0	0
Watertown	306	706.6	70	97	29	6	23	17	3	13	2	1	4
Wayland	87	612.3	12	26	6	4	4	6	1	1	1	0	1
Webster	223	982.3	70	50	14	5	16	8	6	6	2	0	3
Wellesley	175	559.3	50	42	11	5	12	6	5	4	1	0	0
Wellfleet	41	1,020.9	5	13	4	0	4	3	0	3	2	0	1
Wendell	6	1,449.1	0	2	0	1	0	0	0	0	0	0	0
Wenham	28	596.0	5	8	1	0	2	4	1	1	0	1	0
West Boylston	58	658.3	11	13	3	0	3	5	3	3	1	0	0
West Bridgewater	56	599.1	18	15	4	0	0	3	1	5	0	1	1
West Brookfield	43	549.0	16	11	2	2	5	2	1	1	0	0	1
West Newbury	21	708.7	2	7	2	1	2	3	1	2	0	0	0



Table C-14A. (continued) Selected Causes of Death by Community, 2000

COMMUNITY	Total Deaths	Age-adjusted Death Rate <sup>1</sup>	Heart Disease	Total Cancer	Lung Cancer	Female Breast Cancer <sup>2</sup>	Stroke	Chronic Lower Respiratory Disease <sup>3</sup>	Diabetes	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide
West Springfield	295	878.4	73	82	20	9	14	26	7	5	4	1	3
West Stockbridge	11	571.0	4	4	0	0	0	1	0	0	0	0	0
West Tisbury	24	1,403.8	6	4	0	0	3	1	1	3	2	0	0
Westborough	160	795.7	44	38	10	5	7	7	3	11	0	0	0
Westfield	368	837.3	120	63	9	3	32	16	9	17	0	0	3
Westford	99	756.6	30	21	3	0	5	7	3	2	1	0	0
Westhampton	11	1,163.5	1	3	0	1	3	1	0	1	0	0	0
Westminster	32	568.8	8	7	0	0	0	1	0	2	0	0	1
Weston	101	573.2	20	20	1	5	10	4	2	8	0	0	2
Westport	117	740.7	30	36	10	5	2	8	1	2	1	0	1
Westwood	166	690.5	47	32	9	4	15	12	3	10	0	0	0
Weymouth	487	775.6	136	123	36	6	23	33	10	10	3	1	10
Whately	19	1,194.1	7	3	0	1	1	1	1	0	0	0	0
Whitman	108	974.5	31	31	16	2	5	7	2	1	3	0	1
Wilbraham	143	787.4	35	36	8	6	12	6	2	2	2	0	1
Williamsburg	18	722.7	4	3	0	0	1	2	0	1	0	0	0
Williamstown	91	631.4	22	19	4	2	8	4	1	6	0	0	1
Wilmington	189	1,010.0	51	55	19	4	9	8	6	2	0	0	0
Winchendon	70	854.3	22	11	2	1	4	6	2	3	1	0	0
Winchester	189	577.8	57	38	8	3	29	7	3	12	1	0	0
Windsor	4	-- <sup>4</sup>	1	1	0	1	0	0	0	0	0	0	0
Winthrop	191	777.4	49	55	8	4	9	10	1	11	3	0	1
Woburn	356	853.2	101	87	24	7	25	17	14	9	2	0	3
Worcester	1,826	932.6	478	385	106	34	120	92	61	81	13	4	23
Worthington	6	515.3	0	1	0	0	0	2	0	0	0	0	0
Wrentham	89	810.8	26	14	5	2	4	1	1	4	1	0	0
Yarmouth	417	735.4	108	103	23	5	35	12	10	14	4	0	1

1. All rates are age adjusted using the 2000 US standard population. 2. Includes only female breast cancer. 3. The title of this cause of changed between ICD-10 an ICD-9. Chronic Lower Respiratory Disease (ICD-10 title) corresponds to Chronic Obstructive Pulmonary Disease (COPD) (ICD-9 title). 4. Age-adjusted rates based on fewer than five events are excluded.

**Table C-14B. Selected Causes of Death by Community Health Network Area (CHNA), 2000**

CHNA (Name and Number)	Total Deaths	Age-adjusted Death Rate <sup>1</sup>	Heart Disease	Total Cancer	Lung Cancer	Breast Cancer <sup>2</sup>	Stroke	Chronic Lower Respiratory Disease <sup>3</sup>	Diabetes	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide
<b>Massachusetts</b>	<b>56,591</b>	<b>816.5</b>	<b>15,313</b>	<b>14,006</b>	<b>3,763</b>	<b>1,055</b>	<b>3,645</b>	<b>2,911</b>	<b>1,353</b>	<b>2,110</b>	<b>490</b>	<b>125</b>	<b>401</b>
Community Health Network of Berkshire (1)	1,547	806.9	431	354	110	28	110	107	47	63	10	1	9
Upper Valley Health Web (Franklin County) (2)	870	839.8	262	177	40	10	74	44	21	41	9	0	8
Partnership for Health in Hampshire County (Northampton) (3)	1,275	853.3	340	319	84	27	106	55	37	45	7	0	9
The Community Health Connection (Springfield) (4)	2,968	915.3	730	647	169	55	179	157	82	123	26	11	24
Community Health Network of Southern Worcester County (5)	1,038	846.5	324	245	65	21	62	49	36	39	14	0	12
Community Partners for Health (Milford) (6)	1,089	843.5	296	288	77	20	63	50	32	47	10	0	8
Community Health Network of Greater Metro West (Frammingham) (7)	2,670	757.8	709	673	160	56	157	124	57	107	48	2	16
Community Wellness Coalition (Worcester) (8)	2,803	848.4	738	648	187	56	172	161	84	115	22	7	23
Fitchburg/Gardner Community Health Network (9)	1,996	832.1	502	498	137	33	159	123	46	74	26	3	23
Greater Lowell Community Health Network (10)	2,053	908.2	581	529	141	47	112	130	34	78	21	5	13
Greater Lawrence Community Health Network (11)	1,454	775.2	410	344	85	30	78	66	47	42	12	4	14
Greater Haverhill Community Health Network (12)	1,209	844.7	326	316	95	28	81	73	41	40	12	3	11
Community Health Network North (Beverly/Gloucester) (13)	1,111	755.5	298	278	77	23	86	69	29	35	8	3	6
North Shore Community Health Network (14)	2,759	824.7	752	682	210	45	197	144	69	91	19	6	24
Greater Woburn/Concord/Littleton Community Health Network (15)	1,654	693.5	408	417	111	37	142	78	48	65	11	1	5
North Suburban Health Alliance (Medford/Malden/Melrose) (16)	2,590	812.7	736	647	177	50	162	127	56	103	15	5	14
Greater Cambridge/Somerville Community Health Network (17)	2,235	804.4	587	564	139	38	151	102	40	95	11	1	19
West Suburban Health Network (Newton/Waltham) (18)	2,187	673.5	541	549	126	47	172	100	49	96	9	1	12
Alliance for Community Health (Boston/Chelsea/Revere/Winthrop) (19)	5,874	856.9	1,438	1,482	375	108	354	245	123	218	43	44	42
Blue Hills Community Health Alliance (Greater Quincy) (20)	3,613	795.3	996	928	269	56	197	187	69	150	21	3	30
Four (For) Communities (Holyoke, Chicopee, Ludlow, Westfield) (21)	1,723	891.8	502	358	90	22	135	103	45	64	12	3	10
Greater Brockton Community Health Network (22)	2,001	898.0	569	497	140	39	89	102	42	67	31	4	18
South Shore Community Partners in Prevention (Plymouth) (23)	1,354	809.5	393	365	100	19	65	70	34	47	17	2	11
Greater Attleboro-Taunton Health & Education Response (24)	1,814	822.8	525	484	145	38	102	90	42	55	24	9	11
Partners for a Healthier Community (Fall River) (25)	1,621	871.8	455	414	114	24	115	83	32	64	13	0	6
Greater New Bedford Health & Human Services Coalition (26)	2,142	866.8	679	525	137	38	130	121	46	65	12	4	8
Cape Cod & Islands Community Health Network (27)	2,941	739.4	784	778	202	60	195	151	65	81	27	3	15

1. All rates are age-adjusted using the 2000 US standard population. 2. Includes only female breast cancer. 3. The title of this cause of death has changed between ICD-10 and ICD-9. Chronic Lower Respiratory Disease (ICD-10 title) corresponds to Chronic Obstructive Pulmonary Disease (COPD) (ICD-9 title).

Table C-14C. Selected Causes of Death by County, 2000

County	Total Deaths	Age-adjusted Death Rate <sup>1</sup>	Heart Disease	Total Cancer	Lung Cancer	Breast Cancer <sup>2</sup>	Stroke	Chronic Lower Respiratory Disease <sup>3</sup>	Diabetes	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide
Massachusetts	56,591	816.5	15,313	14,006	3,763	1,055	3,645	2,911	1,353	2,110	490	125	401
Barnstable	2,762	741.6	728	724	183	53	185	143	62	75	25	3	14
Berkshire	1,547	806.9	431	354	110	28	110	107	47	63	10	1	9
Bristol	5,107	848.8	1,520	1,294	353	95	327	265	114	163	46	9	25
Dukes	125	761.5	42	38	11	4	7	3	3	5	2	0	1
Essex	6,533	803.6	1,786	1,620	467	126	442	352	186	208	51	16	55
Franklin	699	837.0	215	136	31	9	60	41	15	34	8	0	7
Hampden	4,729	906.7	1,245	1,020	263	78	314	260	127	189	38	14	34
Hampshire	1,286	850.4	341	319	84	27	109	57	37	46	7	0	9
Middlesex	11,840	780.7	3,143	3,003	766	235	792	584	256	477	106	15	69
Nantucket	54	675.3	14	16	8	3	3	5	0	1	0	0	0
Norfolk	5,830	767.5	1,560	1,533	406	117	336	296	112	237	47	3	48
Plymouth	3,894	847.2	1,133	990	292	55	189	203	81	140	43	10	25
Suffolk	5,477	880.2	1,339	1,375	353	99	324	228	117	203	39	44	40
Worcester	6,708	835.4	1,816	1,584	436	126	447	367	196	269	68	10	65

<sup>1</sup> All rates are age-adjusted using the 2000 US standard population. <sup>2</sup> Includes only female breast cancer. <sup>3</sup> The title of this cause of death has changed between ICD-10 and ICD-9. Chronic Lower Respiratory Disease (ICD-10 title) corresponds to Chronic Obstructive Pulmonary Disease (COPD) (ICD-9 title).

Table C-15  
RESIDENT DEATHS BY CAUSE, SEX, AND RACE  
2000

IDC Code	Cause of Death	Totals		Whites		Blacks		Other	
		Tot	Fem	Tot	Fem	Tot	Fem	Tot	Fem
		Male		Male		Male		Male	
A04	Other bacterial intestinal infections	45	18	27	45	18	27	0	0
A08	Viral and other specified intestinal infections	5	3	2	5	3	2	0	0
A09	Diarrhea and gastroenteritis of presumed infectious origin	7	4	3	7	4	3	0	0
A16	Respiratory tuberculosis, not confirmed bacteriologically or histologically	7	6	1	5	4	1	2	0
A18	Tuberculosis of other organs	2	2	0	2	2	0	0	0
A19	Miliary tuberculosis	2	0	2	2	0	2	0	0
A31	Infection due to other mycobacteria	1	0	1	1	0	1	0	0
A32	Listeriosis	1	1	0	1	1	0	0	0
A39	Meningococcal infection	4	1	3	4	1	3	0	0
A40	Streptococcal septicemia	14	7	7	14	7	7	0	0
A41	Other septicemia	882	384	498	818	353	465	55	27
A43	Nocardiosis	1	0	1	1	0	1	0	0
A49	Bacterial infection of unspecified site	30	22	8	28	21	7	2	1
A52	Late syphilis	1	1	0	1	1	0	0	0
A81	Atypical virus infections of central nervous system	12	6	6	12	6	6	0	0
A87	Viral meningitis	1	1	0	0	0	0	1	0
B00	Herpes-viral [herpes simplex] infections	3	2	1	3	2	1	0	0
B02	Zoster [herpes zoster]	8	3	5	8	3	5	0	0
B15	Acute hepatitis A	3	3	0	2	2	0	1	0
B16	Acute hepatitis B	16	10	6	15	9	6	1	0
B17	Other acute viral hepatitis	71	51	20	63	45	18	7	6
B18	Chronic viral hepatitis	4	2	2	4	2	2	0	0
B19	Unspecified viral hepatitis	1	0	1	1	0	1	0	0
B20	Human immunodeficiency virus [HIV] disease resulting in infectious and parasitic disease	91	63	28	66	47	19	24	15
B21	Human immunodeficiency virus [HIV] disease resulting in malignant neoplasms	17	14	3	14	13	1	3	1
B22	Human immunodeficiency virus [HIV] disease resulting in other specified diseases	19	15	4	13	11	2	6	4
B23	Human immunodeficiency virus [HIV] disease resulting in other conditions	53	34	19	35	22	13	17	11
B24	Unspecified human immunodeficiency virus [HIV] disease	43	32	11	32	24	8	11	8
B25	Cytomegaloviral disease	1	1	0	1	1	0	0	0
B27	Infectious mononucleosis	1	1	0	1	1	0	0	0
B34	Viral infection of unspecified site	9	2	7	9	2	7	0	0
B37	Candidiasis	10	4	6	8	3	5	1	0

Table C-15, 2000

IDC	Code	Cause of Death	Totals			Whites			Blacks			Other		
			Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
B44	Aspergillosis		9	5	4	9	5	4	0	0	0	0	0	0
B45	Cryptococcosis		1	0	1	1	0	1	0	0	0	0	0	0
B46	Zygomycosis		2	2	0	2	2	0	0	0	0	0	0	0
B47	Mycetoma		1	0	1	1	0	1	0	0	0	0	0	0
B49	Unspecified mycosis		15	10	5	14	9	5	0	0	0	1	1	0
B58	Toxoplasmosis		3	3	0	2	2	0	1	1	0	0	0	0
B59	Pneumocystosis		5	2	3	5	2	3	0	0	0	0	0	0
B67	Echinococcosis		1	0	1	0	0	0	0	0	0	1	0	1
B90	Sequelae of tuberculosis		2	1	1	2	1	1	0	0	0	0	0	0
B91	Sequelae of poliomyelitis		8	5	3	8	5	3	0	0	0	0	0	0
B94	Sequelae of other and unspecified infectious and parasitic disease		20	13	7	17	10	7	3	3	0	0	0	0
B99	Other and unspecified infectious diseases		2	0	2	2	0	2	0	0	0	0	0	0
C02	Malignant neoplasm of other and unspecified parts of tongue		47	27	20	46	27	19	1	0	1	0	0	0
C04	Malignant neoplasm of floor of mouth		2	0	2	2	0	2	0	0	0	0	0	0
C05	Malignant neoplasm of palate		7	4	3	7	4	3	0	0	0	0	0	0
C06	Malignant neoplasm of other and unspecified parts of mouth		30	14	16	30	14	16	0	0	0	0	0	0
C07	Malignant neoplasm of parotid gland		15	9	6	15	9	6	0	0	0	0	0	0
C08	Malignant neoplasm of other and unspecified major salivary glands		5	3	2	5	3	2	0	0	0	0	0	0
C09	Malignant neoplasm of tonsil		6	6	0	6	6	0	0	0	0	0	0	0
C10	Malignant neoplasm of oropharynx		12	5	7	12	5	7	0	0	0	0	0	0
C11	Malignant neoplasm of nasopharynx		8	5	3	6	3	3	1	1	0	1	1	0
C12	Malignant neoplasm of pyriform sinus		4	3	1	4	3	1	0	0	0	0	0	0
C13	Malignant neoplasm of hypopharynx		5	2	3	5	2	3	0	0	0	0	0	0
C14	Malignant neoplasm of other and ill-defined sites in the lip, oral cavity, and pharynx		46	33	13	43	30	13	3	3	0	0	0	0
C15	Malignant neoplasm of esophagus		352	272	80	340	262	78	11	9	2	1	1	0
C16	Malignant neoplasm of stomach		375	233	142	345	214	131	25	17	8	5	2	3
C17	Malignant neoplasm of small intestine		23	16	7	22	16	6	0	0	0	1	0	1
C18	Malignant neoplasm of colon		1,255	620	635	1,206	590	616	42	25	17	7	5	2
C19	Malignant neoplasm of rectosigmoid junction		45	26	19	43	25	18	2	1	1	0	0	0
C20	Malignant neoplasm of rectum		196	101	95	192	98	94	3	3	0	1	0	1
C21	Malignant neoplasm of anus and anal canal		15	3	12	14	3	11	1	0	1	0	0	0
C22	Malignant neoplasm of liver and intrahepatic bile ducts		273	187	86	242	165	77	16	9	7	15	13	2
C23	Malignant neoplasm of gallbladder		59	15	44	53	14	39	6	1	5	0	0	0
C24	Malignant neoplasm of other and unspecified parts of biliary tract		43	18	25	43	18	25	0	0	0	0	0	0

Table C-15, 2000

IDC Code	Cause of Death	Totals			Whites			Blacks			Other		
		Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
C25	Malignant neoplasm of pancreas	793	356	437	752	338	414	33	16	17	8	2	6
C26	Malignant neoplasm of other and ill-defined digestive organs	48	16	32	45	14	31	1	1	0	2	1	1
C31	Malignant neoplasm of accessory sinuses	7	3	4	7	3	4	0	0	0	0	0	0
C32	Malignant neoplasm of larynx	98	74	24	91	68	23	7	6	1	0	0	0
C33	Malignant neoplasm of trachea	2	1	1	2	1	1	0	0	0	0	0	0
C34	Malignant neoplasm of bronchus and lung	3,760	2,028	1,732	3,599	1,917	1,682	136	97	39	25	14	11
C37	Malignant neoplasm of thymus	5	4	1	5	4	1	0	0	0	0	0	0
C38	Malignant neoplasm of heart, mediastinum, and pleura	4	1	3	4	1	3	0	0	0	0	0	0
C40	Malignant neoplasm of bone and articular cartilage of limbs	1	1	0	1	1	0	0	0	0	0	0	0
C41	Malignant neoplasm of bone and articular cartilage of other and unspecified sites	29	13	16	25	9	16	3	3	0	1	1	0
C43	Malignant melanoma of skin	227	133	94	226	132	94	1	1	0	0	0	0
C44	Other malignant neoplasms of skin	50	30	20	47	29	18	2	1	1	1	0	1
C45	Mesothelioma	93	72	21	92	71	21	1	1	0	0	0	0
C46	Kaposi's sarcoma	2	2	0	1	1	0	1	1	0	0	0	0
C47	Malignant neoplasm of peripheral nerves and autonomic nervous system	2	1	1	2	1	1	0	0	0	0	0	0
C48	Malignant neoplasm of retroperitoneum and peritoneum	20	4	16	18	4	14	2	0	2	0	0	0
C49	Malignant neoplasm of other connective and soft tissue	85	39	46	82	37	45	3	2	1	0	0	0
C50	Malignant neoplasm of breast	1,060	6	1,054	1,007	6	1,001	42	0	42	11	0	11
C51	Malignant neoplasm of vulva	27	0	27	27	0	27	0	0	0	0	0	0
C52	Malignant neoplasm of vagina	6	0	6	5	0	5	1	0	1	0	0	0
C53	Malignant neoplasm of cervix uteri	72	0	72	60	0	60	8	0	8	4	0	4
C54	Malignant neoplasm of corpus uteri	99	1	98	90	1	89	7	0	7	2	0	2
C55	Malignant neoplasm of uterus, part unspecified	78	0	78	71	0	71	5	0	5	2	0	2
C56	Malignant neoplasm of ovary	352	0	352	345	0	345	5	0	5	2	0	2
C57	Malignant neoplasm of other and unspecified female genital organs	7	0	7	6	0	6	1	0	1	0	0	0
C58	Malignant neoplasm of placenta	2	0	2	2	0	2	0	0	0	0	0	0
C60	Malignant neoplasm of penis	8	8	0	8	8	0	0	0	0	0	0	0
C61	Malignant neoplasm of prostate	764	763	1	719	718	1	43	43	0	2	2	0
C62	Malignant neoplasm of testis	10	10	0	9	9	0	0	0	0	1	1	0
C64	Malignant neoplasm of kidney, except renal pelvis	276	181	95	263	172	91	9	5	4	4	4	0
C65	Malignant neoplasm of renal pelvis	5	2	3	5	2	3	0	0	0	0	0	0
C66	Malignant neoplasm of ureter	9	5	4	9	5	4	0	0	0	0	0	0
C67	Malignant neoplasm of bladder	328	208	120	319	202	117	8	6	2	1	0	1
C68	Malignant neoplasm of other and unspecified urinary organs	6	5	1	6	5	1	0	0	0	0	0	0

Table C-15, 2000

IDC	Code	Cause of Death	Totals			Whites			Blacks			Other		
			Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
C69	Malignant neoplasm of eye and adnexa		4	2	2	4	2	2	0	0	0	0	0	0
C70	Malignant neoplasm of meninges		1	1	0	1	1	0	0	0	0	0	0	0
C71	Malignant neoplasm of brain		301	166	135	291	160	131	7	4	3	3	2	1
C72	Malignant neoplasm of spinal cord, cranial nerves, and other parts of central nervous system		6	4	2	6	4	2	0	0	0	0	0	0
C73	Malignant neoplasm of thyroid gland		31	12	19	28	10	18	2	2	0	1	0	1
C74	Malignant neoplasm of adrenal gland		11	6	5	10	6	4	1	0	1	0	0	0
C75	Malignant neoplasm of other endocrine glands and related structures		4	4	0	3	0	3	1	0	1	0	0	0
C76	Malignant neoplasm of other and ill-defined sites		96	57	39	93	54	39	3	3	0	0	0	0
C78	Secondary malignant neoplasm of respiratory and digestive organs		89	35	54	85	33	52	4	2	2	0	0	0
C79	Secondary malignant neoplasm of other sites		46	21	25	44	21	23	1	0	1	1	0	1
C80	Malignant neoplasm without specification of site		865	407	458	815	377	438	39	23	16	11	7	4
C81	Hodgkin's disease		22	7	15	21	6	15	1	1	0	0	0	0
C83	Diffuse non-Hodgkin's lymphoma		31	16	15	30	15	15	1	1	0	0	0	0
C84	Peripheral and cutaneous T-cell lymphomas		12	6	6	9	6	3	2	0	2	1	0	1
C85	Other and unspecified types of non-Hodgkin's lymphoma		486	218	268	451	211	240	9	3	6	6	4	2
C88	Malignant immunoproliferative diseases		15	9	6	15	9	6	0	0	0	0	0	0
C90	Multiple myeloma and malignant plasma cell neoplasms		228	108	120	214	101	113	14	7	7	0	0	0
C91	Lymphoid leukemia		143	88	55	139	87	52	1	0	1	3	1	2
C92	Myeloid leukemia		216	118	98	202	111	91	10	7	3	4	0	4
C93	Monocytic leukemia		4	3	1	4	3	1	0	0	0	0	0	0
C94	Other leukemias of specified cell type		2	0	2	1	0	1	1	0	1	0	0	0
C95	Leukemia of unspecified cell type		139	65	74	130	60	70	6	3	3	3	2	1
C96	Other and unspecified malignant neoplasms of lymphoid, hematopoietic, and related tissue		1	0	1	1	0	1	0	0	0	0	0	0
C97	Malignant neoplasms of independent (primary) multiple sites		109	61	48	102	56	46	5	3	2	2	2	0
D12	Benign neoplasm of colon, rectum, anus, and anal canal		1	1	0	1	1	0	0	0	0	0	0	0
D13	Benign neoplasm of other and ill-defined partsof digestive system		2	1	1	2	1	1	0	0	0	0	0	0
D15	Benign neoplasm of other and unspecified intrathoracic organs		2	0	2	2	0	2	0	0	0	0	0	0
D16	Benign neoplasm of bone and articular cartilage		1	0	1	1	0	1	0	0	0	0	0	0
D18	Hemangioma and lymphangioma, any site		2	1	1	2	1	1	0	0	0	0	0	0
D23	Other benign neoplasms of skin		2	2	0	2	2	0	0	0	0	0	0	0
D32	Benign neoplasm of meninges		22	4	18	21	4	17	1	0	1	0	0	0
D33	Benign neoplasm of brain and other parts of central nervous system		5	1	4	5	1	4	0	0	0	0	0	0
D35	Benign neoplasm of other and unspecified endocrine glands		1	0	1	1	0	1	0	0	0	0	0	0



Table C-15, 2000

ICD Code	Cause of Death	Totals		Whites		Blacks		Other	
		Tot	Fem	Tot	Male	Tot	Male	Tot	Male
D37	Neoplasm of uncertain or unknown behavior of oral cavity and digestive organs	18	5	13	5	13	0	0	0
D38	Neoplasm of uncertain or unknown behavior of middle ear and respiratory and intrathoracic organs	16	6	10	5	10	0	0	1
D39	Neoplasm of uncertain or unknown behavior of female genital organs	2	0	2	0	2	0	0	0
D40	Neoplasm of uncertain or unknown behavior of male genital organs	2	2	0	2	0	0	0	0
D41	Neoplasm of uncertain or unknown behavior of urinary organs	1	1	0	1	0	0	0	0
D43	Neoplasm of uncertain or unknown behavior of brain and central nervous system	109	52	57	100	47	53	2	3
D44	Neoplasm of uncertain or unknown behavior of endocrine glands	2	1	1	2	1	0	0	0
D45	Polycythemia vera	10	3	7	10	3	7	0	0
D46	Myelodysplastic syndromes	120	62	58	117	61	56	2	1
D47	Other neoplasms of uncertain or unknown behavior of lymphoid, hematopoietic, and related tissue	47	20	27	44	20	24	2	0
D48	Neoplasm of uncertain or unknown behavior of other and unspecified sites	15	7	8	14	6	8	1	1
D50	Iron deficiency anemia	3	2	1	3	2	1	0	0
D51	Vitamin B12 deficiency anemia	5	0	5	5	0	5	0	0
D56	Thalassemia	1	0	1	0	0	0	1	0
D57	Sickle-cell disorders	2	1	1	1	0	1	1	0
D58	Other hereditary hemolytic anemias	10	4	6	9	3	6	1	1
D59	Acquired hemolytic anemia	1	1	0	1	1	0	0	0
D61	Other aplastic anemias	20	7	13	20	7	13	0	0
D64	Other anemias	67	23	44	65	22	43	2	1
D65	Disseminated intravascular coagulation [defibrination syndrome]	14	3	11	13	3	10	1	0
D66	Hereditary factor VIII deficiency	2	2	0	2	0	0	0	0
D68	Other coagulation defects	24	13	11	23	12	11	0	0
D69	Purpura and other hemorrhagic conditions	16	9	7	16	9	7	0	0
D70	Agranulocytosis	8	4	4	7	3	4	0	0
D72	Other disorders of white blood cells	2	1	1	2	1	1	0	0
D73	Diseases of spleen	5	5	0	5	0	0	0	0
D75	Other diseases of blood and blood-forming organs	1	0	1	1	0	1	0	0
D80	Immunodeficiency with predominantly antibody defects	1	0	1	1	0	1	0	0
D81	Combined immunodeficiencies	1	1	0	1	1	0	0	0
D83	Common variable immunodeficiency	4	2	2	3	2	1	1	0
D84	Other immunodeficiencies	17	10	7	12	7	5	3	2
D86	Sarcoidosis	11	5	6	7	3	4	2	2



Table C-15, 2000

IDC	Code	Cause of Death	Totals			Whites			Blacks			Other		
			Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
D89	Other disorders involving the immune mechanism, not elsewhere classified	Other hypothyroidism	2	0	2	2	0	2	0	0	0	0	0	0
		Other nontoxic goiter	36	7	29	36	7	29	0	0	0	0	0	0
E04	Thyrotoxicosis [hyperthyroidism]	Other disorders of thyroid	3	2	1	3	2	1	0	0	0	0	0	0
		Other disorders of thyroid	6	1	5	5	1	4	0	0	0	1	0	1
E07	Insulin-dependent diabetes mellitus	Other disorders of thyroid	2	0	2	2	0	2	0	0	0	0	0	0
		Other disorders of thyroid	114	55	59	107	52	55	7	3	4	0	0	0
E10	Noninsulin-dependent diabetes mellitus	Other disorders of thyroid	164	69	95	159	67	92	4	1	3	1	1	0
		Other disorders of thyroid	1,074	514	560	998	482	516	63	25	38	13	7	6
E14	Unspecified diabetes mellitus	Other disorders of thyroid	6	5	1	5	4	1	1	1	0	0	0	0
		Other disorders of thyroid	2	0	2	2	0	2	0	0	0	0	0	0
E21	Hyperparathyroidism and other disorders of parathyroid gland	Other disorders of thyroid	1	1	0	1	1	0	0	0	0	0	0	0
		Other disorders of thyroid	3	1	2	3	1	2	0	0	0	0	0	0
E23	Hypofunction and other disorders of the pituitary gland	Other disorders of thyroid	1	0	1	1	0	1	0	0	0	0	0	0
		Other disorders of thyroid	5	2	3	5	2	3	0	0	0	0	0	0
E27	Cushing's syndrome	Other disorders of thyroid	2	1	1	2	1	1	0	0	0	0	0	0
		Other disorders of thyroid	2	1	1	2	1	1	0	0	0	0	0	0
E34	Other endocrine disorders	Other disorders of thyroid	2	0	2	2	0	2	0	0	0	0	0	0
		Other disorders of thyroid	2	1	1	2	1	1	0	0	0	0	0	0
E41	Nutritional marasmus	Other disorders of thyroid	2	1	1	2	1	1	0	0	0	0	0	0
		Other disorders of thyroid	2	1	1	2	1	1	0	0	0	0	0	0
E43	Unspecified severe protein-energy malnutrition	Other disorders of thyroid	2	1	1	2	1	1	0	0	0	0	0	0
		Other disorders of thyroid	2	0	2	2	0	2	0	0	0	0	0	0
E45	Retarded development following protein-energy malnutrition	Other disorders of thyroid	45	15	30	44	15	29	0	0	0	1	0	1
		Other disorders of thyroid	2	1	1	2	1	1	0	0	0	0	0	0
E46	Unspecified protein-energy malnutrition	Other disorders of thyroid	2	0	2	2	0	2	0	0	0	0	0	0
		Other disorders of thyroid	2	0	2	2	0	2	0	0	0	0	0	0
E53	Deficiency of other B group vitamins	Other disorders of thyroid	2	1	1	2	1	1	0	0	0	0	0	0
		Other disorders of thyroid	2	0	2	2	0	2	0	0	0	0	0	0
E63	Other nutritional deficiencies	Other disorders of thyroid	12	0	12	12	0	12	0	0	0	0	0	0
		Other disorders of thyroid	71	38	33	62	38	24	9	0	9	0	0	0
E64	Sequelae of malnutrition and other nutritional deficiencies	Other disorders of thyroid	1	1	0	1	1	0	0	0	0	0	0	0
		Other disorders of thyroid	1	1	0	1	1	0	0	0	0	0	0	0
E66	Obesity	Other disorders of thyroid	1	1	0	1	1	0	0	0	0	0	0	0
		Other disorders of thyroid	1	1	0	1	1	0	0	0	0	0	0	0
E71	Disorders of branched-chain amino-acid metabolism and fatty-acid metabolism	Other disorders of thyroid	8	8	0	8	8	0	0	0	0	0	0	0
		Other disorders of thyroid	1	0	1	1	0	1	0	0	0	0	0	0
E74	Other disorders of carbohydrate metabolism	Other disorders of thyroid	1	0	1	1	0	1	0	0	0	0	0	0
		Other disorders of thyroid	1	0	1	1	0	1	0	0	0	0	0	0
E75	Disorders of sphingolipid metabolism and other lipid storage disorders	Other disorders of thyroid	8	8	0	8	8	0	0	0	0	0	0	0
		Other disorders of thyroid	1	0	1	1	0	1	0	0	0	0	0	0
E76	Disorders of glycosaminoglycan metabolism	Other disorders of thyroid	1	1	0	1	1	0	0	0	0	0	0	0
		Other disorders of thyroid	1	1	0	1	1	0	0	0	0	0	0	0
E77	Disorders of glycoprotein metabolism	Other disorders of thyroid	65	35	30	63	34	29	2	1	1	0	0	0
		Other disorders of thyroid	1	0	1	1	0	1	0	0	0	0	0	0
E80	Disorders of porphyrin and bilirubin metabolism	Other disorders of thyroid	13	7	6	12	6	6	1	1	0	0	0	0
		Other disorders of thyroid	14	8	6	14	8	6	0	0	0	0	0	0
E84	Cystic fibrosis	Other disorders of thyroid	30	12	18	29	12	17	1	0	1	0	0	0
		Other disorders of thyroid												

Table C-15, 2000

IDC	Code	Cause of Death	Totals			Whites			Blacks			Other		
			Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
E86	Volume depletion		204	60	144	200	60	140	4	0	4	0	0	0
E87	Other disorders of fluid, electrolyte, and acid-base balance		87	38	49	79	35	44	5	3	2	3	0	3
E88	Other metabolic disorders		19	8	11	19	8	11	0	0	0	0	0	0
F01	Vascular dementia		16	6	10	16	6	10	0	0	0	0	0	0
F03	Unspecified dementia		1,165	315	850	1,132	304	828	30	9	21	3	2	1
F05	Delirium, not induced by alcohol and other psychoactive substances		3	2	1	3	2	1	0	0	0	0	0	0
F06	Other mental disorders due to brain damage and dysfunction and to physical disease		148	44	104	146	43	103	2	1	1	0	0	0
F07	Personality and behavioral disorders due to brain disease, damage, and dysfunction		1	1	0	1	1	0	0	0	0	0	0	0
F09	Unspecified organic or symptomatic mental disorder		1	1	0	1	1	0	0	0	0	0	0	0
F10	Mental and behavioral disorders due to use of alcohol		145	121	24	134	111	23	11	10	1	0	0	0
F11	Mental and behavioral disorders due to use of opioids		3	2	1	2	2	0	1	1	0	0	0	0
F17	Mental and behavioral disorders due to use of tobacco		7	3	4	7	3	4	0	0	0	0	0	0
F19	Mental and behavioral disorders due to multiple-drug use and use of other psychoactive substances		14	14	0	12	12	0	2	2	0	0	0	0
F20	Schizophrenia		12	6	6	12	6	6	0	0	0	0	0	0
F29	Unspecified nonorganic psychosis		4	1	3	4	1	3	0	0	0	0	0	0
F31	Bipolar affective disorder		4	1	3	4	1	3	0	0	0	0	0	0
F32	Depressive episode		30	8	22	30	8	22	0	0	0	0	0	0
F50	Eating disorders		2	2	0	2	0	2	0	0	0	0	0	0
F54	Psychological and behavioral factors associated with disorders or diseases classified elsewhere		2	1	1	2	1	1	0	0	0	0	0	0
F68	Other disorders of adult personality and behavior		1	1	0	1	1	0	0	0	0	0	0	0
F72	Severe mental retardation		1	1	0	1	1	0	0	0	0	0	0	0
F73	Profound mental retardation		2	2	0	2	2	0	0	0	0	0	0	0
F79	Unspecified mental retardation		9	6	3	9	6	3	0	0	0	0	0	0
G00	Bacterial meningitis, not elsewhere classified		3	1	2	3	1	2	0	0	0	0	0	0
G03	Meningitis due to other and unspecified causes		11	4	7	11	4	7	0	0	0	0	0	0
G04	Encephalitis, myelitis, and encephalomyelitis		10	8	2	7	5	2	3	3	0	0	0	0
G06	Intracranial and intraspinal abscess and granuloma		8	6	2	8	6	2	0	0	0	0	0	0
G09	Sequelae of inflammatory diseases of central nervous system		1	1	0	1	1	0	0	0	0	0	0	0
G10	Huntington's disease		13	6	7	13	6	7	0	0	0	0	0	0
G11	Hereditary ataxia		2	0	2	2	0	2	0	0	0	0	0	0
G12	Spinal muscular atrophy and related syndromes		168	91	77	162	87	75	5	4	1	1	0	1
G20	Parkinson's disease		418	237	181	411	233	178	7	4	3	0	0	0

Table C-15, 2000

IDC	Code	Cause of Death	Totals			Whites			Blacks			Other		
			Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
	G21	Secondary parkinsonism	4	3	1	4	3	1	0	0	0	0	0	0
	G23	Other degenerative diseases of basal ganglia	4	1	3	4	1	3	0	0	0	0	0	0
	G24	Dystonia	2	1	1	2	1	1	0	0	0	0	0	0
	G30	Alzheimer's disease	1,427	379	1,048	1,398	365	1,033	26	12	14	3	2	1
	G31	Other degenerative diseases of nervous system, not elsewhere classified	52	19	33	51	18	33	0	0	0	1	1	0
	G35	Multiple sclerosis	84	28	56	80	25	55	3	3	0	1	0	1
	G37	Other demyelinating diseases of central nervous system	1	0	1	0	0	0	1	0	1	0	0	0
	G40	Epilepsy	10	7	3	9	6	3	1	1	0	0	0	0
	G41	Status epilepticus	14	1	13	11	1	10	3	0	3	0	0	0
	G45	Transient cerebral ischemic attacks and related syndromes	8	2	6	8	2	6	0	0	0	0	0	0
	G47	Sleep disorders	12	7	5	12	7	5	0	0	0	0	0	0
	G60	Hereditary and idiopathic neuropathy	1	0	1	1	0	1	0	0	0	0	0	0
	G61	Inflammatory polyneuropathy	3	3	0	3	3	0	0	0	0	0	0	0
	G62	Other polyneuropathies	4	3	1	4	3	1	0	0	0	0	0	0
	G70	Myasthenia gravis and other myoneural disorders	12	7	5	12	7	5	0	0	0	0	0	0
	G71	Primary disorders of muscles	19	11	8	17	10	7	1	1	0	1	0	1
	G72	Other myopathies	1	0	1	1	0	1	0	0	0	0	0	0
	G80	Infantile cerebral palsy	16	8	8	13	6	7	3	2	1	0	0	0
	G81	Hemiplegia	4	3	1	3	2	1	0	0	0	1	1	0
	G82	Paraplegia and tetraplegia	16	11	5	14	10	4	1	0	1	1	1	0
	G83	Other paralytic syndromes	1	0	1	1	0	1	0	0	0	0	0	0
	G90	Disorders of autonomic nervous system	7	2	5	7	2	5	0	0	0	0	0	0
	G91	Hydrocephalus	18	9	9	17	9	8	1	0	1	0	0	0
	G92	Toxic encephalopathy	1	1	0	1	1	0	0	0	0	0	0	0
	G93	Other disorders of brain	152	76	76	135	70	65	13	6	7	4	0	4
	G95	Other diseases of spinal cord	14	7	7	13	7	6	1	0	1	0	0	0
	G96	Other disorders of central nervous system	2	2	0	2	2	0	0	0	0	0	0	0
	G98	Other disorders of nervous system, not elsewhere classified	4	3	1	4	3	1	0	0	0	0	0	0
	H49	Paralytic strabismus	1	0	1	1	0	1	0	0	0	0	0	0
	I00	Rheumatic fever without mention of heart involvement	1	0	1	1	0	1	0	0	0	0	0	0
	I05	Rheumatic mitral valve diseases	34	9	25	34	9	25	0	0	0	0	0	0
	I07	Rheumatic tricuspid valve diseases	8	1	7	7	1	6	1	0	1	0	0	0
	I08	Multiple valve diseases	3	1	2	3	1	2	0	0	0	0	0	0
	I09	Other rheumatic heart diseases	21	6	15	20	5	15	1	0	0	0	0	0

Table C-15, 2000

ICD Code	Cause of Death	Totals			Whites			Blacks			Other		
		Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
I10	Essential (primary) hypertension	302	96	206	284	89	195	14	5	9	4	2	2
I11	Hypertensive heart disease	239	92	147	220	82	138	17	9	8	2	1	1
I12	Hypertensive renal disease	103	41	62	96	38	58	6	3	3	1	0	1
I13	Hypertensive heart and renal disease	24	8	16	24	8	16	0	0	0	0	0	0
I20	Angina pectoris	19	7	12	14	4	10	3	2	1	2	1	1
I21	Acute myocardial infarction	3,907	1,926	1,981	3,758	1,857	1,901	115	51	64	34	18	16
I24	Other acute ischemic heart diseases	47	23	24	45	22	23	0	0	0	2	1	1
I25	Chronic ischemic heart disease	6,252	3,109	3,143	6,034	2,998	3,036	186	94	92	32	17	15
I26	Pulmonary embolism	186	71	115	174	67	107	11	3	8	1	1	0
I27	Other pulmonary heart diseases	102	43	59	92	38	54	8	5	3	2	0	2
I28	Other diseases of pulmonary vessels	2	0	2	2	0	2	0	0	0	0	0	0
I31	Other diseases of pericardium	16	6	10	14	5	9	2	1	1	0	0	0
I33	Acute and subacute endocarditis	20	14	6	19	14	5	1	0	1	0	0	0
I34	Nonrheumatic mitral valve disorders	82	17	65	81	17	64	0	0	0	1	0	1
I35	Nonrheumatic aortic valve disorders	369	113	256	363	113	250	4	0	4	2	0	2
I37	Pulmonary valve disorders	1	0	1	1	0	1	0	0	0	0	0	0
I38	Endocarditis, valve unspecified	82	31	51	78	29	49	4	2	2	0	0	0
I40	Acute myocarditis	11	5	6	9	3	6	0	0	0	2	2	0
I42	Cardiomyopathy	461	283	178	432	261	171	27	20	7	2	2	0
I44	Atrioventricular and left bundle-branch block	12	3	9	11	3	8	1	0	1	0	0	0
I45	Other conduction disorders	8	3	5	8	3	5	0	0	0	0	0	0
I46	Cardiac arrest	696	335	361	665	323	342	27	9	18	4	3	1
I47	Paroxysmal tachycardia	16	3	13	15	3	12	1	0	1	0	0	0
I48	Atrial fibrillation and flutter	286	94	192	282	92	190	2	0	2	2	2	0
I49	Other cardiac arrhythmias	388	205	183	358	193	165	27	9	18	3	3	0
I50	Heart failure	1,809	637	1,172	1,770	622	1,148	30	8	22	9	7	2
I51	Complications and ill-defined descriptions of heart disease	163	93	70	155	88	67	5	3	2	3	2	1
I60	Subarachnoid hemorrhage	150	43	107	141	41	100	6	2	4	3	0	3
I61	Intracerebral hemorrhage	424	180	244	403	168	235	12	7	5	9	5	4
I62	Other nontraumatic intracranial hemorrhage	133	51	82	123	45	78	4	1	3	6	5	1
I63	Cerebral infarction	269	77	192	262	74	188	6	3	3	1	0	1
I64	Stroke, not specified as hemorrhage or infarction	1,848	593	1,255	1,767	566	1,201	61	20	41	20	7	13
I67	Other cerebrovascular diseases	123	37	86	118	34	84	3	1	2	2	2	0
I69	Sequelae of cerebrovascular disease	695	253	442	659	234	425	27	16	11	9	3	6

Table C-15, 2000

IDC	Code	Cause of Death	Totals			Whites			Blacks			Other		
			Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
I70		Atherosclerosis	310	113	197	306	111	195	3	1	2	1	1	0
I71		Aortic aneurysm and dissection	375	208	167	368	204	164	5	3	2	2	1	1
I72		Other aneurysm	23	14	9	21	14	7	1	0	1	1	0	1
I73		Other peripheral vascular diseases	196	71	125	190	70	120	5	1	4	1	0	1
I74		Arterial embolism and thrombosis	17	8	9	16	7	9	1	1	0	0	0	0
I77		Other disorders of arteries and arterioles	28	17	11	26	16	10	1	0	1	1	1	0
I80		Phlebitis and thrombophlebitis	36	11	25	36	11	25	0	0	0	0	0	0
I82		Other venous embolism and thrombosis	1	1	0	1	1	0	0	0	0	0	0	0
I83		Varicose veins of lower extremities	7	3	4	7	3	4	0	0	0	0	0	0
I85		Esophageal varices	8	6	2	8	6	2	0	0	0	0	0	0
I87		Other disorders of veins	4	0	4	3	0	3	1	0	1	0	0	0
I95		Hypotension	17	10	7	16	9	7	1	1	0	0	0	0
I99		Other and unspecified disorders of circulatory system	2	2	0	2	2	0	0	0	0	0	0	0
J06		Acute upper respiratory infections of multiple and unspecified sites	1	0	1	1	0	1	0	0	0	0	0	0
J11		Influenza, virus not identified	16	6	10	14	5	9	2	1	1	0	0	0
J12		Viral pneumonia, not elsewhere classified	3	1	2	3	1	2	0	0	0	0	0	0
J13		Pneumonia due to Streptococcus pneumoniae	8	3	5	8	3	5	0	0	0	0	0	0
J15		Bacterial pneumonia, not elsewhere classified	101	54	47	100	54	46	1	0	1	0	0	0
J18		Pneumonia, organism unspecified	1,981	815	1,166	1,931	791	1,140	42	20	22	8	4	4
J20		Acute bronchitis	2	0	2	2	0	2	0	0	0	0	0	0
J21		Acute bronchiolitis	2	2	0	2	2	0	0	0	0	0	0	0
J22		Unspecified acute lower respiratory infection	1	0	1	1	0	1	0	0	0	0	0	0
J32		Chronic sinusitis	2	1	1	1	0	1	1	1	0	0	0	0
J38		Diseases of vocal cords and larynx, not elsewhere classified	5	2	3	5	2	3	0	0	0	0	0	0
J39		Other diseases of upper respiratory tract	10	1	9	10	1	9	0	0	0	0	0	0
J40		Bronchitis, not specified as acute or chronic	17	8	9	16	8	8	1	0	1	0	0	0
J42		Unspecified chronic bronchitis	14	9	5	13	8	5	1	1	0	0	0	0
J43		Empysema	395	169	226	389	167	222	5	1	4	1	1	0
J44		Other chronic obstructive pulmonary disease	2,361	1,054	1,307	2,314	1,027	1,287	36	20	16	11	7	4
J45		Asthma	95	35	60	86	31	55	8	3	5	1	1	0
J46		Status asthmaticus	10	6	4	8	5	3	1	1	0	1	0	1
J47		Bronchiectasis	19	1	18	19	1	18	0	0	0	0	0	0
J61		Pneumoconiosis due to asbestos and other mineral fibers	13	13	0	13	13	0	0	0	0	0	0	0
J62		Pneumoconiosis due to dust containing silica	1	1	0	1	1	0	0	0	0	0	0	0

Table C-15, 2000

ICD Code	Cause of Death	Totals			Whites			Blacks			Other		
		Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
		1	0	1	1	0	1	0	0	0	0	0	0
J67	Hypersensitivity pneumonitis due to organic dust	608	295	313	586	283	303	16	8	8	6	4	2
J69	Pneumonitis due to solids and liquids	55	37	18	53	37	16	0	0	0	2	0	2
J80	Adult respiratory distress syndrome	31	18	13	28	17	11	2	1	1	1	0	1
J81	Pulmonary edema	4	1	3	4	1	3	0	0	0	0	0	0
J82	Pulmonary eosinophilia, not elsewhere classified	330	163	167	318	156	162	8	5	3	4	2	2
J84	Other interstitial pulmonary diseases	8	6	2	6	5	1	2	1	1	0	0	0
J85	Abscess of lung and mediastinum	17	11	6	17	11	6	0	0	0	0	0	0
J86	Pyothorax	30	16	14	28	15	13	2	1	1	0	0	0
J90	Pleural effusion, not elsewhere classified	8	2	6	7	2	5	1	0	1	0	0	0
J93	Pneumothorax	5	2	3	4	2	2	1	0	1	0	0	0
J94	Other pleural conditions	364	132	232	349	126	223	14	6	8	1	0	1
J96	Respiratory failure, not elsewhere classified	146	56	90	142	53	89	4	3	1	0	0	0
J98	Other respiratory disorders	4	2	2	4	2	2	0	0	0	0	0	0
K11	Diseases of salivary glands	1	1	0	1	1	0	0	0	0	0	0	0
K12	Stomatitis and related lesions	5	3	2	5	3	2	0	0	0	0	0	0
K20	Esophagitis	18	6	12	18	6	12	0	0	0	0	0	0
K21	Gastroesophageal reflux disease	31	11	20	31	11	20	0	0	0	0	0	0
K22	Other diseases of esophagus	20	3	17	19	3	16	1	0	1	0	0	0
K25	Gastric ulcer	31	11	20	31	11	20	0	0	0	0	0	0
K26	Duodenal ulcer	32	15	17	32	15	17	0	0	0	0	0	0
K27	Peptic ulcer, site unspecified	3	2	1	2	1	1	0	0	0	1	1	0
K28	Gastrojejunal ulcer	10	2	8	9	1	8	0	0	0	1	1	0
K29	Gastritis and duodenitis	12	6	6	12	6	6	0	0	0	0	0	0
K31	Other diseases of stomach and duodenum	7	6	1	6	5	1	1	1	0	0	0	0
K35	Acute appendicitis	2	1	1	2	1	1	0	0	0	0	0	0
K40	Inguinal hernia	3	1	2	3	1	2	0	0	0	0	0	0
K41	Femoral hernia	1	0	1	1	0	1	0	0	0	0	0	0
K42	Umbilical hernia	8	1	7	8	1	7	0	0	0	0	0	0
K43	Ventral hernia	6	1	5	6	1	5	0	0	0	0	0	0
K44	Diaphragmatic hernia	11	5	6	10	4	6	1	1	0	0	0	0
K46	Unspecified abdominal hernia	19	10	9	19	10	9	0	0	0	0	0	0
K50	Crohn's disease [regional enteritis]	5	1	4	5	1	4	0	0	0	0	0	0
K51	Ulcerative colitis	36	9	27	36	9	27	0	0	0	0	0	0
K52	Other noninfective gastroenteritis and colitis												

Table C-15, 2000

ICD Code	Cause of Death	Totals			Whites			Blacks			Other	
		Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male
K55	Vascular disorders of intestine	246	95	151	229	87	142	13	7	6	4	1
K56	Paralytic ileus and intestinal obstruction without hernia	154	60	94	148	57	91	5	2	3	1	1
K57	Diverticular disease of intestine	68	21	47	66	20	46	2	1	1	0	0
K59	Other functional intestinal disorders	13	4	9	13	4	9	0	0	0	0	0
K60	Fissure and fistula of anal and rectal regions	1	0	1	1	0	1	0	0	0	0	0
K61	Abscess of anal and rectal regions	2	1	1	2	1	1	0	0	0	0	0
K62	Other diseases of anus and rectum	9	3	6	9	3	6	0	0	0	0	0
K63	Other diseases of intestine	65	27	38	61	24	37	4	3	1	0	0
K65	Peritonitis	45	20	25	41	20	21	2	0	2	2	0
K66	Other disorders of peritoneum	2	0	2	2	0	2	0	0	0	0	0
K70	Alcoholic liver disease	178	133	45	166	127	39	10	5	5	2	1
K72	Hepatic failure, not elsewhere classified	154	91	63	147	88	59	5	1	4	2	2
K73	Chronic hepatitis, not elsewhere classified	7	1	6	7	1	6	0	0	0	0	0
K74	Fibrosis and cirrhosis of liver	349	205	144	339	200	139	9	4	5	1	1
K75	Other inflammatory liver diseases	11	8	3	8	6	2	3	2	1	0	0
K76	Other diseases of liver	90	52	38	88	51	37	0	0	0	0	0
K80	Cholelithiasis	22	11	11	18	9	9	1	0	1	3	2
K81	Cholecystitis	40	20	20	39	19	20	0	0	0	1	1
K82	Other diseases of gallbladder	3	2	1	3	2	1	0	0	0	0	0
K83	Other diseases of biliary tract	45	15	30	45	15	30	0	0	0	0	0
K85	Acute pancreatitis	72	34	38	65	30	35	5	2	3	2	2
K86	Other diseases of pancreas	13	7	6	11	6	5	2	1	1	0	0
K90	Intestinal malabsorption	2	1	1	2	1	1	0	0	0	0	0
K92	Other diseases of the digestive system	293	115	178	278	112	166	9	3	6	6	0
L02	Cutaneous abscess, furuncle, and carbuncle	2	1	1	2	1	1	0	0	0	0	0
L03	Cellulitis	34	10	24	31	10	21	3	0	0	0	0
L08	Other local infections of skin and subcutaneous tissue	4	1	3	4	1	3	0	0	0	0	0
L10	Pemphigus	1	0	1	1	0	1	0	0	0	0	0
L12	Pemphigoid	2	0	2	2	0	2	0	0	0	0	0
L26	Exfoliative dermatitis	1	0	1	1	0	1	0	0	0	0	0
L30	Other dermatitis	2	0	2	2	0	2	0	0	0	0	0
L51	Erythema multiforme	1	0	1	1	0	1	0	0	0	0	0
L88	Pyoderma gangrenosum	1	0	1	1	0	1	0	0	0	0	0
L89	Decubitus ulcer	33	10	23	28	8	20	5	2	3	0	0

Table C-15, 2000

ICD Code	Cause of Death	Totals				Whites				Blacks				Other			
		Tot		Male		Tot		Male		Tot		Male		Tot		Male	
		Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem
L93	Lupus erythematosus	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0
L97	Ulcer of lower limb, not elsewhere classified	6	3	3	3	5	3	2	2	1	0	1	0	0	0	0	0
L98	Other disorders of skin and subcutaneous tissue, not elsewhere classified	4	0	4	0	4	0	4	0	0	0	0	0	0	0	0	0
M00	Pyogenic arthritis	8	6	2	7	6	1	6	1	1	0	1	0	0	0	0	0
M05	Seropositive rheumatoid arthritis	3	0	3	2	0	2	1	0	1	0	1	0	0	0	0	0
M06	Other rheumatoid arthritis	47	12	35	47	12	35	0	0	0	0	0	0	0	0	0	0
M08	Juvenile arthritis	1	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0
M13	Other arthritis	3	0	3	3	0	3	0	3	0	0	0	0	0	0	0	0
M15	Polyarthrosis	1	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0
M19	Other arthrosis	24	3	21	23	3	20	0	0	0	0	0	0	1	0	0	1
M25	Other joint disorders, not elsewhere classified	1	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0
M30	Polyarteritis nodosa and related conditions	1	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0
M31	Other necrotizing vasculopathies	17	7	10	17	7	10	0	0	0	0	0	0	0	0	0	0
M32	Systemic lupus erythematosus	18	2	16	13	2	11	5	0	5	0	0	0	0	0	0	0
M33	Dermatopolymyositis	6	2	4	6	2	4	0	0	0	0	0	0	0	0	0	0
M34	Systemic sclerosis	26	7	19	25	7	18	1	0	1	0	1	0	0	0	0	0
M35	Other systemic involvement of connective tissue	10	3	7	9	3	6	1	0	1	0	1	0	0	0	0	0
M41	Scoliosis	5	1	4	5	1	4	0	0	0	0	0	0	0	0	0	0
M45	Ankylosing spondylitis	1	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0
M46	Other inflammatory spondylopathies	1	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0
M47	Spondylitis	1	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0
M48	Other spondylopathies	2	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0
M51	Other intervertebral disc disorders	1	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0
M60	Myositis	5	5	0	4	4	0	0	0	0	0	0	0	1	0	1	0
M62	Other disorders of muscle	6	4	2	5	3	2	1	1	0	0	1	0	0	0	0	0
M65	Synovitis and tenosynovitis	1	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0
M70	Soft tissue disorders related to use, overuse, and pressure	1	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0
M72	Fibroblastic disorders	6	1	5	5	1	4	0	0	0	0	0	0	1	0	1	0
M79	Other soft tissue disorders, not elsewhere classified	1	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0
M80	Osteoporosis with pathological fracture	18	2	16	18	2	16	0	0	0	0	0	0	0	0	0	0
M81	Osteoporosis without pathological fracture	17	1	16	17	1	16	0	0	0	0	0	0	0	0	0	0
M84	Disorders of continuity of bone	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0
M86	Osteomyelitis	26	12	14	22	10	12	4	2	2	2	0	0	0	0	0	0
M87	Osteonecrosis	1	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0



Table C-15, 2000

IDC	Code	Cause of Death	Totals			Whites			Blacks			Other		
			Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
M88		Paget's disease of bone [osteitis deformans]	4	1	3	4	1	3	0	0	0	0	0	0
M89		Other disorders of bone	1	1	0	1	1	0	0	0	0	0	0	0
N00		Acute nephritic syndrome	1	0	1	1	0	1	0	0	0	0	0	0
N01		Rapidly progressive nephritic syndrome	1	0	1	1	0	1	0	0	0	0	0	0
N03		Chronic nephritic syndrome	3	2	1	3	2	1	0	0	0	0	0	0
N04		Nephrotic syndrome	6	2	4	6	2	4	0	0	0	0	0	0
N05		Unspecified nephritic syndrome	1	1	0	1	1	0	0	0	0	0	0	0
N12		Tubulo-interstitial nephritis, not specified as acute or chronic	7	1	6	5	1	4	1	0	1	1	0	1
N13		Obstructive and reflux uropathy	4	3	1	4	3	1	0	0	0	0	0	0
N14		Drug- and heavy-metal-induced tubulo-interstitial and tubular conditions	1	1	0	1	1	0	0	0	0	0	0	0
N17		Acute renal failure	174	75	99	165	72	93	7	2	5	2	1	1
N18		Chronic renal failure	484	251	213	414	227	187	44	21	23	6	3	3
N19		Unspecified renal failure	576	284	292	541	266	275	34	17	17	1	1	0
N20		Calculus of kidney and ureter	5	2	3	5	2	3	0	0	0	0	0	0
N25		Disorders resulting from impaired renal tubular function	1	0	1	1	0	1	0	0	0	0	0	0
N26		Unspecified contracted kidney	3	1	2	3	1	2	0	0	0	0	0	0
N28		Other disorders of kidney and ureter, not elsewhere classified	17	8	9	16	7	9	1	1	0	0	0	0
N30		Cystitis	1	1	0	1	1	0	0	0	0	0	0	0
N31		Neuromuscular dysfunction of bladder, not elsewhere classified	2	0	2	2	0	2	0	0	0	0	0	0
N32		Other disorders of bladder	3	1	2	3	1	2	0	0	0	0	0	0
N34		Urethritis and urethral syndrome	1	1	0	1	1	0	0	0	0	0	0	0
N39		Other disorders of urinary system	1	1	0	1	1	0	0	0	0	0	0	0
N40		Hyperplasia of prostate	343	96	247	333	95	238	9	1	8	1	0	1
N41		Inflammatory diseases of prostate	6	6	0	6	6	0	0	0	0	0	0	0
N81		Female genital prolapse	1	1	0	1	1	0	0	0	0	0	0	0
N82		Fistulae involving female genital tract	2	0	2	2	0	2	0	0	0	0	0	0
N94		Pain and other conditions associated with female genital organs and menstrual cycle	1	0	1	1	0	1	0	0	0	0	0	0
N95		Menopausal and other perimenopausal disorders	1	0	1	1	0	1	0	0	1	0	0	0
O29		Complications of anesthesia during pregnancy	1	0	1	1	0	1	0	0	0	0	0	0
P01		Newborn affected by maternal complications of pregnancy	31	16	15	21	10	11	8	4	4	2	2	0
P02		Newborn affected by complications of placenta, cord, and membranes	9	5	4	8	5	3	1	0	1	0	0	0
P03		Newborn affected by other complications of labor and delivery	4	3	1	3	2	1	1	1	0	0	0	0
P04		Newborn affected by noxious influences transmitted via placenta or breast milk	2	2	0	2	2	0	0	0	0	0	0	0
P07		Disorders related to short gestation and low birthweight, not elsewhere classified	81	37	44	56	24	32	22	12	10	3	1	2

Table C-15, 2000

ICD Code	Cause of Death	Totals			Whites			Blacks			Other		
		Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
P20	Intrauterine hypoxia	1	0	1	0	0	0	1	0	1	0	0	0
P21	Birth asphyxia	11	9	2	7	6	1	3	2	1	1	1	0
P22	Respiratory distress of newborn	14	11	3	13	11	2	1	0	1	0	0	0
P23	Congenital pneumonia	1	1	0	1	1	0	0	0	0	0	0	0
P25	Interstitial emphysema and related conditions originating in the perinatal period	5	4	1	3	3	0	1	1	0	1	0	1
P26	Pulmonary hemorrhage originating in the perinatal period	7	2	5	5	2	3	2	0	2	0	0	0
P28	Other respiratory conditions originating in the perinatal period	8	3	5	7	3	4	0	0	0	1	0	1
P29	Cardiovascular disorders originating in the perinatal period	22	12	10	18	11	7	3	1	2	1	0	1
P36	Bacterial sepsis of newborn	9	6	3	5	4	1	4	2	2	0	0	0
P50	Fetal blood loss	1	1	0	0	0	0	0	0	0	1	1	0
P52	Intracranial nontraumatic hemorrhage of fetus and newborn	10	6	4	9	5	4	1	1	0	0	0	0
P61	Other perinatal hematological disorders	1	1	0	1	1	0	0	0	0	0	0	0
P77	Necrotizing enterocolitis of newborn	6	4	2	4	3	1	0	0	0	2	1	1
P78	Other perinatal digestive system disorders	1	1	0	1	1	0	0	0	0	0	0	0
P83	Other conditions of integument specific to newborn	2	1	1	2	1	1	0	0	0	0	0	0
P90	Convulsions of newborn	1	0	1	0	0	0	1	0	0	0	0	0
P96	Other conditions originating in the perinatal period	4	2	2	4	2	2	0	0	0	0	0	0
Q00	Anencephaly and similar malformations	5	1	4	4	0	4	1	1	0	0	0	0
Q01	Encephalocele	1	1	0	0	0	0	1	1	0	0	0	0
Q04	Other congenital malformations of brain	5	3	2	5	3	2	0	0	0	0	0	0
Q05	Spina bifida	3	1	2	3	1	2	0	0	0	0	0	0
Q20	Congenital malformations of cardiac chambers and connections	3	1	2	3	1	2	0	0	0	0	0	0
Q21	Congenital malformations of cardiac septa	3	1	2	3	1	2	0	0	0	0	0	0
Q22	Congenital malformations of pulmonary and tricuspid valves	11	7	4	9	5	4	2	2	0	0	0	0
Q23	Congenital malformations of aortic and mitral valves	1	1	0	1	1	0	0	0	0	0	0	0
Q24	Other congenital malformations of heart	4	2	2	4	2	2	0	0	0	0	0	0
Q25	Congenital malformations of great arteries	21	10	11	18	7	11	3	3	0	0	0	0
Q27	Other congenital malformations of peripheral vascular system	5	4	1	2	1	1	1	1	0	2	2	0
Q28	Other congenital malformations of circulatory system	5	3	2	5	3	2	0	0	0	0	0	0
Q32	Congenital malformations of trachea and bronchus	3	1	2	3	1	2	0	0	0	0	0	0
Q33	Congenital malformations of lung	2	0	2	2	0	2	0	0	0	0	0	0
Q60	Renal agenesis and other reduction defects of kidney	8	7	1	5	4	1	1	1	0	2	2	0
Q61	Cystic kidney disease	3	2	1	2	1	1	1	1	0	0	0	0
Q68	Other congenital musculoskeletal deformities	7	5	2	7	5	2	0	0	0	0	0	0
		1	0	1	1	0	1	0	0	0	0	0	0

Table C-15, 2000

IDC	Code	Cause of Death	Totals			Whites			Blacks			Other		
			Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
	Q79	Congenital malformations of musculoskeletal system, not elsewhere classified	2	2	0	0	0	0	1	1	0	1	1	0
	Q85	Phakomatoses, not elsewhere classified	2	2	0	0	0	0	1	1	0	1	1	0
	Q87	Other specified congenital malformation syndromes affecting multiple systems	3	1	2	3	1	2	0	0	0	0	0	0
	Q89	Other congenital malformations, not elsewhere classified	6	4	2	6	4	2	0	0	0	0	0	0
	Q90	Down's syndrome	17	10	7	16	9	7	1	1	0	0	0	0
	Q91	Edwards' syndrome and Patau's syndrome	12	5	7	7	3	4	5	2	3	0	0	0
	R00	Abnormalities of heart beat	10	6	4	10	6	4	0	0	0	0	0	0
	R02	Gangrene, not elsewhere classified	9	1	8	8	1	7	1	0	1	0	0	0
	R04	Hemorrhage from respiratory passages	3	1	2	1	1	0	2	0	2	0	0	0
	R06	Abnormalities of breathing	5	5	0	4	4	0	1	1	0	0	0	0
	R07	Pain in throat and chest	1	1	0	1	1	0	0	0	0	0	0	0
	R09	Other symptoms and signs involving the circulatory and respiratory systems	94	41	53	91	40	51	3	1	2	0	0	0
	R10	Abdominal and pelvic pain	3	2	1	2	1	1	1	1	0	0	0	0
	R11	Nausea and vomiting	1	0	1	1	0	1	0	0	0	0	0	0
	R13	Dysphagia	3	0	3	3	0	3	0	0	0	0	0	0
	R17	Unspecified jaundice	1	1	0	1	1	0	0	0	0	0	0	0
	R19	Other symptoms and signs involving the digestive system and abdomen	7	4	3	6	3	3	1	1	0	0	0	0
	R40	Somnolence, stupor, and coma	1	1	0	1	1	0	0	0	0	0	0	0
	R50	Fever of unknown origin	2	0	2	2	0	2	0	0	0	0	0	0
	R53	Malaise and fatigue	6	2	4	6	2	4	0	0	0	0	0	0
	R54	Senility	28	3	25	28	3	25	0	0	0	0	0	0
	R56	Convulsions, not elsewhere classified	27	19	8	24	16	8	2	2	0	1	1	0
	R57	Shock, not elsewhere classified	33	14	19	28	11	17	3	1	2	2	2	0
	R58	Hemorrhage, not elsewhere classified	7	2	5	6	2	4	1	0	1	0	0	0
	R60	Edema, not elsewhere classified	2	1	1	2	1	1	0	0	0	0	0	0
	R62	Lack of expected normal physiological development	53	10	43	53	10	43	0	0	0	0	0	0
	R64	Cachexia	4	2	2	4	2	2	0	0	0	0	0	0
	R79	Other abnormal findings of blood chemistry	1	0	1	1	0	1	0	0	0	0	0	0
	R90	Abnormal findings on diagnostic imaging of central nervous system	1	0	1	1	0	1	0	0	0	0	0	0
	R91	Abnormal findings on diagnostic imaging of lung	9	5	4	9	5	4	0	0	0	0	0	0
	R95	Sudden infant death syndrome	18	9	9	15	7	8	2	1	1	1	1	0
	R96	Other sudden death, cause unknown	3	0	3	3	0	3	0	0	0	0	0	0
	R99	Other ill-defined and unspecified causes of mortality	347	215	132	310	191	119	31	20	11	6	4	2
	V02	Pedestrian injured in collision with two- or three-wheeled motor vehicle	2	2	0	2	2	0	0	0	0	0	0	0

Table C-15, 2000

IDC	Cause of Death	Totals			Whites			Blacks			Other		
		Tot	Male		Tot	Male		Tot	Male		Tot	Male	
			Fem	Fem		Fem	Fem		Fem	Fem		Fem	Fem
V03	Pedestrian injured in collision with car, pickup truck, or van	16	9	7	15	8	7	1	1	0	0	0	0
V04	Pedestrian injured in collision with heavy transport vehicle or bus	7	5	2	6	4	2	0	0	0	1	1	0
V05	Pedestrian injured in collision with railway train or railway vehicle	4	3	1	4	3	1	0	0	0	0	0	0
V09	Pedestrian injured in other and unspecified transport accidents	54	39	15	49	35	14	5	4	1	0	0	0
V13	Pedal cyclist injured in collision with car, pickup truck, or van	6	6	0	6	6	0	0	0	0	0	0	0
V17	Pedal cyclist injured in collision with fixed or stationary object	1	1	0	1	1	0	0	0	0	0	0	0
V18	Pedal cyclist injured in noncollision transport accident	1	1	0	1	1	0	0	0	0	0	0	0
V19	Pedal cyclist injured in other and unspecified transport accidents	7	6	1	7	6	1	0	0	0	0	0	0
V23	Motorcycle rider injured in collision with car, pickup truck, or van	4	4	0	4	4	0	0	0	0	0	0	0
V27	Motorcycle rider injured in collision with fixed or stationary object	10	10	0	10	10	0	0	0	0	0	0	0
V28	Motorcycle rider injured in noncollision transport accident	1	1	0	1	1	0	0	0	0	0	0	0
V29	Motorcycle rider injured in other and unspecified transport accidents	16	14	2	11	9	2	4	4	0	1	1	0
V38	Occupant of three-wheeled motor vehicle injured in noncollision transport accident	2	2	0	2	2	0	0	0	0	0	0	0
V43	Car occupant injured in collision with car, pickup truck, or van	16	6	10	16	6	10	0	0	0	0	0	0
V44	Car occupant injured in collision with heavy transport vehicle or bus	8	4	4	8	4	4	0	0	0	0	0	0
V47	Car occupant injured in collision with fixed or stationary object	30	20	10	26	17	9	4	3	1	0	0	0
V48	Car occupant injured in noncollision transport accident	3	2	1	3	2	1	0	0	0	0	0	0
V49	Car occupant injured in other and unspecified transport accidents	9	7	2	7	6	1	0	0	0	2	1	1
V53	Occupant of pickup truck or van injured in collision with car, pickup truck, or van	1	1	0	1	1	0	0	0	0	0	0	0
V57	Occupant of pickup truck or van injured in collision with fixed or stationary object	3	2	1	3	2	1	0	0	0	0	0	0
V59	Occupant of pickup truck or van injured in other and unspecified transport accidents	2	1	1	2	1	1	0	0	0	0	0	0
V69	Occupant of heavy transport vehicle injured in other and unspecified transport accidents	1	1	0	1	1	0	0	0	0	0	0	0
V80	Animal-rider or occupant of animal-drawn vehicle injured in transport accident	2	0	2	2	0	2	0	0	0	0	0	0
V83	Occupant of special vehicle mainly used on industrial premises injured in transport accident	2	2	0	2	2	0	0	0	0	0	0	0
V84	Occupant of special vehicle mainly used in agriculture injured in transport accident	1	1	0	1	1	0	0	0	0	0	0	0
V86	Occupant of special all-terrain or other motor vehicle designed primarily for off-road use, injured in transport accident	2	2	0	2	2	0	0	0	0	0	0	0
V87	Traffic accident of specified type but victim's mode of transport unknown	24	10	14	22	9	13	0	0	0	2	1	1
V88	Nontraffic accident of specified type but victim's mode of transport unknown	1	1	0	0	0	0	1	1	0	0	0	0
V89	Motor- or nonmotor-vehicle accident, type of vehicle unspecified	266	176	90	242	162	80	9	5	4	15	9	6
V90	Accident to watercraft causing drowning and submersion	2	1	1	2	1	1	0	0	0	0	0	0
V92	Water-transport-related drowning and submersion without accident to watercraft	2	2	0	1	1	0	0	0	0	1	1	0
V94	Other and unspecified water transport accidents	1	1	0	1	1	0	0	0	0	0	0	0
V95	Accident to powered aircraft causing injury to occupant	5	5	0	5	5	0	0	0	0	0	0	0

Table C-15, 2000

IDC	Code Cause of Death	Totals			Whites			Blacks			Other		
		Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
W00	Fall on same level involving ice and snow	2	1	1	2	1	1	0	0	0	0	0	0
W01	Fall on same level from slipping, tripping, and stumbling	3	1	2	3	1	2	0	0	0	0	0	0
W02	Fall involving ice skates, skis, roller skates, or skateboards	3	1	2	3	1	2	0	0	0	0	0	0
W06	Fall involving bed	1	1	0	1	1	0	0	0	0	0	0	0
W07	Fall involving chair	4	3	1	4	3	1	0	0	0	0	0	0
W10	Fall on and from stairs and steps	49	24	25	47	23	24	1	1	0	1	0	1
W11	Fall on and from ladder	3	3	0	2	2	0	1	1	0	0	0	0
W12	Fall on and from scaffolding	1	1	0	1	1	0	0	0	0	0	0	0
W13	Fall from, out of, or through building or structure	4	3	1	3	3	0	0	0	0	1	0	1
W17	Other fall from one level to another	10	9	1	10	9	1	0	0	0	0	0	0
W18	Other fall on same level	11	5	6	11	5	6	0	0	0	0	0	0
W19	Unspecified fall	104	57	47	100	54	46	3	2	1	1	1	0
W20	Struck by thrown, projected, or falling object	3	3	0	3	3	0	0	0	0	0	0	0
W21	Striking against or struck by sports equipment	2	2	0	2	2	0	0	0	0	0	0	0
W23	Caught, crushed, jammed, or pinched in or between objects	1	1	0	1	1	0	0	0	0	0	0	0
W24	Contact with lifting and transmission devices, not elsewhere classified	1	1	0	1	1	0	0	0	0	0	0	0
W30	Contact with agricultural machinery	1	1	0	1	1	0	0	0	0	0	0	0
W31	Contact with other and unspecified machinery	2	2	0	2	2	0	0	0	0	0	0	0
W33	Rifle, shotgun, and larger firearm discharge	1	0	1	1	0	1	0	0	0	0	0	0
W34	Discharge from other and unspecified firearms	2	2	0	2	2	0	0	0	0	0	0	0
W40	Explosion of other materials	1	1	0	1	1	0	0	0	0	0	0	0
W49	Exposure to other and unspecified inanimate mechanical forces	1	1	0	1	1	0	0	0	0	0	0	0
W65	Drowning and submersion while in bathtub	3	0	3	2	0	2	1	0	1	0	0	0
W67	Drowning and submersion while in swimming pool	9	8	1	9	8	1	0	0	0	0	0	0
W68	Drowning and submersion following fall into swimming pool	1	0	1	1	0	1	0	0	0	0	0	0
W69	Drowning and submersion while in natural water	1	1	0	0	0	0	1	1	0	0	0	0
W70	Drowning and submersion following fall into natural water	2	2	0	2	2	0	0	0	0	0	0	0
W73	Other specified drowning and submersion	3	2	1	2	2	0	1	0	1	0	0	0
W74	Unspecified drowning and submersion	22	16	6	20	16	4	2	0	2	0	0	0
W75	Accidental suffocation and strangulation in bed	1	1	0	1	1	0	0	0	0	0	0	0
W76	Other accidental hanging and strangulation	3	3	0	3	3	0	0	0	0	0	0	0
W78	Inhalation of gastric contents	5	3	2	5	3	2	0	0	0	0	0	0
W79	Inhalation and ingestion of food causing obstruction of respiratory tract	23	12	11	21	10	11	1	1	0	1	1	0
W80	Inhalation and ingestion of other objects causing obstruction of respiratory tract	80	38	42	76	37	39	4	1	3	0	0	0

Table C-15, 2000

IDC	Cause of Death	Totals			Whites			Blacks			Other		
		Tot		Fem	Tot		Fem	Tot		Fem	Tot		Fem
		Male	Fem		Male	Fem		Male	Fem		Male	Fem	
W83	Other specified threats to breathing	2	2	0	2	2	0	0	0	0	0	0	0
W84	Unspecified threat to breathing	9	6	3	8	6	2	1	0	1	0	0	0
W87	Exposure to unspecified electric current	1	1	0	1	1	0	0	0	0	0	0	0
W94	Exposure to high and low air pressure and changes in air pressure	1	0	1	1	0	1	0	0	0	0	0	0
X00	Exposure to uncontrolled fire in building or structure	54	33	21	48	28	20	4	4	0	2	1	1
X03	Exposure to controlled fire, not in building or structure	1	1	0	1	1	0	0	0	0	0	0	0
X06	Exposure to ignition or melting of other clothing and apparel	3	1	2	3	1	2	0	0	0	0	0	0
X16	Contact with hot heating appliances, radiators, and pipes	1	0	1	1	0	1	0	0	0	0	0	0
X23	Contact with hornets, wasps, and bees	1	1	0	1	1	0	0	0	0	0	0	0
X30	Exposure to excessive natural heat	1	0	1	0	0	0	1	0	1	0	0	0
X31	Exposure to excessive natural cold	26	19	7	20	15	5	6	4	2	0	0	0
X35	Victim of volcanic eruption	1	0	1	1	0	1	0	0	0	0	0	0
X41	Accidental poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism, and psychotropic drugs, not elsewhere classified	1	0	1	1	0	1	0	0	0	0	0	0
X42	Accidental poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified	23	18	5	23	18	5	0	0	0	0	0	0
X44	Accidental poisoning by and exposure to other and unspecified drugs, medicaments, and biological substances	18	13	5	17	12	5	0	0	0	1	1	0
X45	Accidental poisoning by and exposure to alcohol	1	1	0	0	0	0	1	1	0	0	0	0
X46	Accidental poisoning by and exposure to organic solvents and halogenated hydrocarbons and their vapors	1	1	0	1	1	0	0	0	0	0	0	0
X47	Accidental poisoning by and exposure to other gases and vapors	1	1	0	1	1	0	0	0	0	0	0	0
X49	Accidental poisoning by and exposure to other and unspecified chemicals and noxious substances	1	1	0	1	1	0	0	0	0	0	0	0
X53	Lack of food	2	1	1	2	1	1	0	0	0	0	0	0
X57	Unspecified privation	4	3	1	4	3	1	0	0	0	0	0	0
X58	Exposure to other specified factors	1	1	0	1	1	0	0	0	0	0	0	0
X59	Exposure to unspecified factor	301	114	187	289	108	181	7	4	3	5	2	3
X60	Intentional self-poisoning (suicide) by and exposure to nonopioid analgesics, antipyretics, and antirheumatics	3	1	2	3	1	2	0	0	0	0	0	0
X61	Intentional self-poisoning (suicide) by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism, and psychotropic drugs, not elsewhere classified	24	4	20	23	4	19	0	0	0	1	0	1
X62	Intentional self-poisoning (suicide) by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified	13	4	9	13	4	9	0	0	0	0	0	0

Table C-15, 2000

IDC Code	Cause of Death	Totals			Whites			Blacks			Other		
		Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
X64	Intentional self-poisoning (suicide) by and exposure to other and unspecified drugs, medicaments, and biological substances	25	10	15	24	10	14	0	0	0	1	0	1
X67	Intentional self-poisoning (suicide) by and exposure to other gases and vapors	21	18	3	21	18	3	0	0	0	0	0	0
X69	Intentional self-poisoning (suicide) by and exposure to other and unspecified chemicals	1	0	1	1	0	1	0	0	0	0	0	0
X70	Intentional self harm (suicide) by hanging, strangulation, and suffocation	135	111	24	124	104	20	9	5	4	2	2	0
X71	Intentional self harm (suicide) by drowning and submersion	8	6	2	8	6	2	0	0	0	0	0	0
X72	Intentional self harm (suicide) by handgun discharge	11	9	2	9	8	1	2	1	1	0	0	0
X73	Intentional self harm (suicide) by rifle, shotgun, and larger firearm discharge	26	26	0	26	26	0	0	0	0	0	0	0
X74	Intentional self harm (suicide) by other and unspecified firearm discharge	65	58	7	61	54	7	4	4	0	0	0	0
X76	Intentional self harm (suicide) by smoke, fire, and flames	1	1	0	1	1	0	0	0	0	0	0	0
X78	Intentional self harm (suicide) by sharp object	9	6	3	8	5	3	1	1	0	0	0	0
X80	Intentional self harm (suicide) by jumping from a high place	20	13	7	18	11	7	2	2	0	0	0	0
X81	Intentional self harm (suicide) by jumping or lying before moving object	11	10	1	11	10	1	0	0	0	0	0	0
X82	Intentional self harm (suicide) by crashing of motor vehicle	3	3	0	3	3	0	0	0	0	0	0	0
X83	Intentional self harm (suicide) by other specified means	4	4	0	4	4	0	0	0	0	0	0	0
X84	Intentional self harm (suicide) by unspecified means	3	2	1	3	2	1	0	0	0	0	0	0
X91	Assault (homicide) by hanging, strangulation, and suffocation	6	1	5	6	1	5	0	0	0	0	0	0
X93	Assault (homicide) by handgun discharge	7	6	1	5	4	1	2	2	0	0	0	0
X94	Assault (homicide) by rifle, shotgun, and larger firearm discharge	2	1	1	1	1	0	1	0	1	0	0	0
X95	Assault (homicide) by other and unspecified firearm discharge	58	47	11	29	21	8	28	25	3	1	1	0
X96	Assault (homicide) by explosive material	1	0	1	1	0	1	0	0	0	0	0	0
X99	Assault (homicide) by sharp object	28	20	8	16	11	5	9	7	2	3	2	1
Y04	Assault (homicide) by bodily force	3	3	0	2	2	0	0	0	0	1	1	0
Y07	Other maltreatment syndromes	6	2	4	5	1	4	0	0	0	1	1	0
Y08	Assault (homicide) by other specified means	2	1	1	1	1	0	1	0	1	0	0	0
Y09	Assault (homicide) by unspecified means	8	5	3	8	5	3	0	0	0	0	0	0
Y11	Poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism, and psychotropic drugs, not elsewhere classified, undetermined intent	21	10	11	19	9	10	2	1	1	0	0	0
Y12	Poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified, undetermined intent	312	247	65	291	232	59	18	13	5	3	2	1
Y13	Poisoning by and exposure to other drugs acting on the autonomic nervous system, undetermined intent	3	1	2	2	1	1	1	0	1	0	0	0
Y14	Poisoning by and exposure to other and unspecified drugs, medicaments, and biological substances, undetermined intent	12	4	8	12	4	8	0	0	0	0	0	0



Table C-15, 2000

ICD Code Cause of Death	Totals		Whites		Blacks		Other	
	Tot	Male	Tot	Male	Tot	Male	Tot	Male
	Fem	Fem	Fem	Fem	Fem	Fem	Fem	Fem
Y15 Poisoning by and exposure to alcohol, undetermined intent	8	6	2	8	6	2	0	0
Y17 Poisoning by and exposure to other gases and vapors, undetermined intent	5	3	2	5	3	2	0	0
Y19 Poisoning by and exposure to other and unspecified chemicals and noxious substances, undetermined intent	1	1	0	0	0	0	0	0
Y20 Hanging, strangulation, and suffocation, undetermined intent	1	1	0	1	1	0	0	0
Y21 Drowning and submersion, undetermined intent	10	8	2	7	5	2	3	0
Y24 Other and unspecified firearm discharge, undetermined intent	1	1	0	1	1	0	0	0
Y26 Exposure to smoke, fire, and flames, undetermined intent	1	1	0	1	1	0	0	0
Y28 Contact with sharp object, undetermined intent	1	0	1	1	1	0	0	0
Y29 Contact with blunt object, undetermined intent	1	0	1	1	0	1	0	0
Y30 Falling, jumping, or pushed from a high place, undetermined intent	1	1	0	1	1	0	0	0
Y33 Other specified events, undetermined intent	3	1	2	3	1	2	0	0
Y34 Unspecified event, undetermined intent	7	3	4	5	3	2	2	0
Y35 Legal intervention	1	1	0	0	0	0	1	0
Y42 Hormones and their synthetic substitutes and antagonists, not elsewhere classified	1	1	0	1	1	0	0	0
Y44 Agents primarily affecting blood constituents	2	2	0	2	2	0	0	0
Y45 Analgesics, antipyretics, and anti-inflammatory drugs	1	1	0	1	1	0	0	0
Y83 Surgical operation and other surgical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure	27	14	13	27	14	13	0	0
Y84 Other medical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure	2	0	2	2	0	2	0	0
Y85 Sequelae of transport accidents	2	2	0	2	2	0	0	0
Y86 Sequelae of other accidents	17	8	9	17	8	9	0	0
Y87 Sequelae of intentional self harm, assault, and events of undetermined intent	4	1	3	4	1	3	0	0



## INFANT & NEONATAL DEATHS



## SECTION D

### INFANT AND NEONATAL DEATHS

The total number of resident infant deaths (deaths of children less than 1 year of age) decreased by 9.8% in Massachusetts from 418 in 1999 to 377 in 2000. The rate of infant deaths also decreased from 5.2 infant deaths per 1,000 live births in 1999 to 4.6 infant deaths per 1,000 live births in 2000. As with live births and other deaths, all Massachusetts resident infant deaths are included regardless of the state in which they occurred. Neonatal deaths (deaths of infants under 28 days of age) decreased from 332 in 1999 to 288 in 2000, a decrease of 13.3%. The rate of neonatal deaths also decreased, from 4.1 in 1999 to 3.5 in 2000.

#### INFANT DEATHS BY RACE

Beginning with the publication of 1989 data, several changes occurred in the method of calculating infant mortality rates (IMRs) by race and ethnicity. These changes affect only the calculation of race/ethnicity infant mortality rates; all other data presented in this publication are comparable to information from previous years. These changes are the result of new federal recommendations for analyzing birth information, including infant mortality data, and the implementation of the new Massachusetts Standard Certificate of Death in 1989.

Infants born to Black, non-Hispanic mothers continue to have the highest infant mortality rates (IMRs). The IMR for Black, non-Hispanics in 2000 was 12.8 per 1,000 live births. This represents an increase of 0.5 (4.1%) from the 1999 rate, and it is over triple the IMR for White, non-Hispanic infants.

In 2000, the IMR for Hispanics had decreased from 5.5 in 1999 to 5.2 per 1,000 live births in 2000. The mortality experience of infants born to Hispanic mothers is more similar to the experience of infants born to white non-Hispanic mothers than to black non-Hispanic mothers. The 2000 IMR of 5.2 for Hispanic infants is 26.9% higher than the white non-Hispanic rate and 59.4% below the black non-Hispanic rate.

Asian mothers had the second lowest rate of infant mortality compared to the other race/ethnicity groups. They have been the lowest group in recent years with the exception of 1995. In 2000, the Asian IMR was 4.1 deaths per 1,000 live births. However, caution should be used when interpreting this rate since it is based on a small number (19) of deaths.

#### INFANT DEATHS BY CAUSE

"Certain conditions originating in the perinatal period" (medical conditions arising from approximately 28 weeks gestation to 28 days of age) was the leading cause of death for White non-Hispanic, Asian non-Hispanic, Black non-Hispanic and Hispanic infants causing 61% of all fatalities. Congenital anomalies represented the second leading cause of death within each of the groups.

The overall leading causes of infant death were conditions arising in the perinatal period (229 deaths) and congenital anomalies (57 deaths), a 12.2% increase and 14.9% decrease, respectively, from 1999. Other causes of infant death were: SIDS (26 deaths), "Disorders relating to short gestation and unspecified low birthweight" (80 deaths), "Other respiratory conditions of newborn" (20 deaths), and homicide (2 deaths). There were 2 more deaths from SIDS in 2000 than there were in 1999, representing an 8.3% increase. The number of homicide deaths (2) has remained relatively constant since 1994.

SIDS remains the leading cause of death in the post-neonatal period (28-364 days), while "disorders relating to short gestation and low birthweight" was the leading cause in the neonatal period.

## NEONATAL AND POST NEONATAL MORTALITY RATES

The neonatal mortality rate (infants less than 28 days old) was 3.5 deaths per 1,000 live births in 2000. Among White, non-Hispanic mothers, the neonatal mortality rate decreased (21.6%), from 3.7 in 1999 to 2.9 in 2000. During this same time period, the rate remained at a constant 9.9 among Black, non-Hispanic mothers and decreased by 9.1% among Hispanic mothers (from 4.4 in 1999 to 4.0 in 2000). Among Asians, the number of neonatal deaths increased from 5 in 1999 to 14 in 1998, with rates of 1.2 and 3.0 respectively. These rates should be interpreted cautiously since they are based on very few deaths.

The overall post-neonatal mortality rate, representing the number of deaths of infants between 28 and 364 days of age per 1,000 live births, remained fairly constant between 1999 and 2000, at 1.1. The post-neonatal mortality rate among infants of White, non-Hispanic mothers decreased slightly from 1.0 in 1999 to 0.9 in 2000 deaths per 1,000 live births. The most marked change was among infants of Black, non-Hispanic mothers, where the post neonatal mortality rate rose between 1999 and 2000, from 2.4 in 1999 to 2.9 deaths per 1,000 births in 2000; a 20.8% increase.

There was a small increase in the rate of post neonatal deaths among Hispanics, from 1.1 to 1.2, corresponding to a rate increase of 9.1%. The number of post neonatal deaths among Asians changed from 3 deaths in 1999 to 5 death in 2000 giving a rate of 1.1 deaths per 1,000 live births in 2000.

## DEFINITIONS IMPORTANT FOR THIS SECTION INCLUDE:

### INFANT DEATH

Death of a child whose age is less than one year (365 days).

### NEONATAL DEATH

Death of a child whose age is less than 28 days.

### POST-NEONATAL DEATH

Death of a child whose age is at least 28 days, but less than one year.

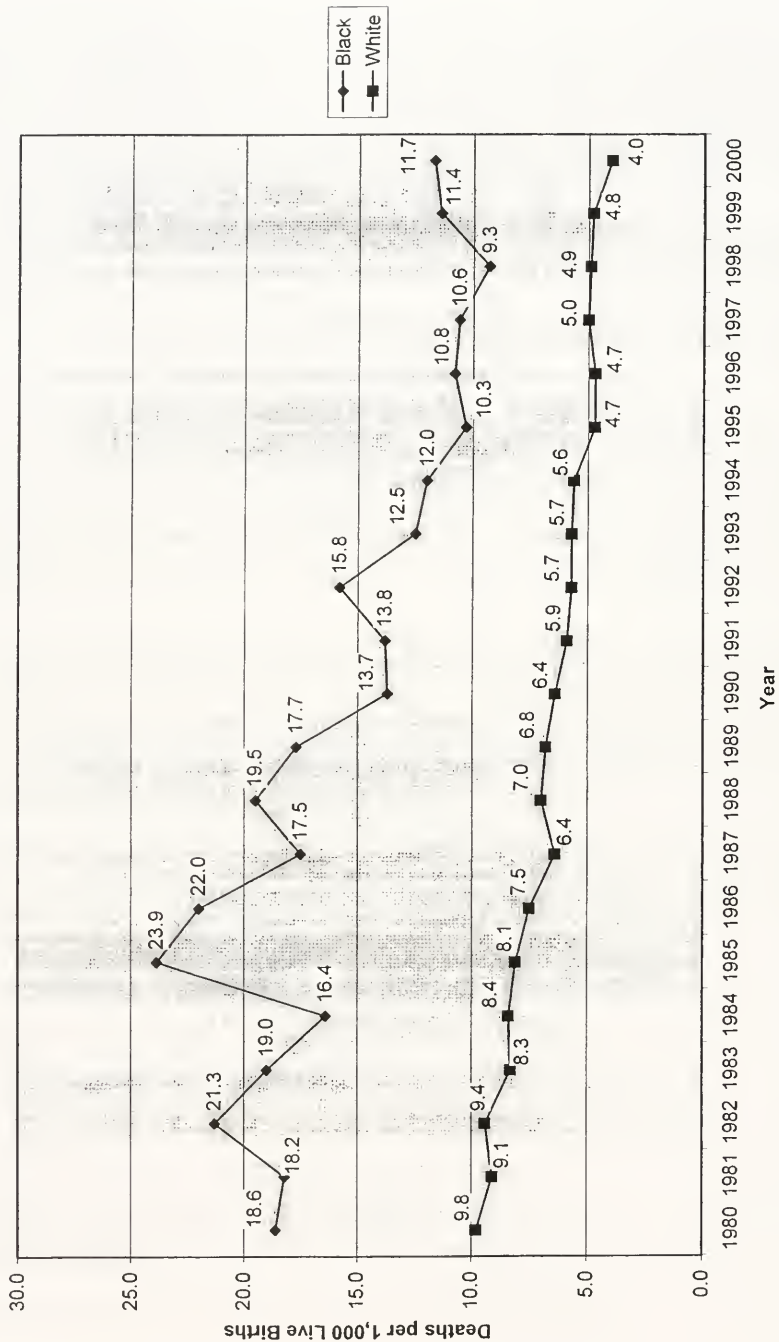
RATES IMPORTANT FOR THIS SECTION INCLUDE:

INFANT MORTALITY RATE (IMR)  $\frac{\# \text{ of Resident Deaths at Less than 1 Year of Age} \times 1,000}{\text{Total Resident Live Births}}$

NEONATAL MORTALITY RATE (NMR)  $\frac{\# \text{ of Resident Deaths at Less than 28 Days of Age} \times 1,000}{\text{Total Resident Live Births}}$

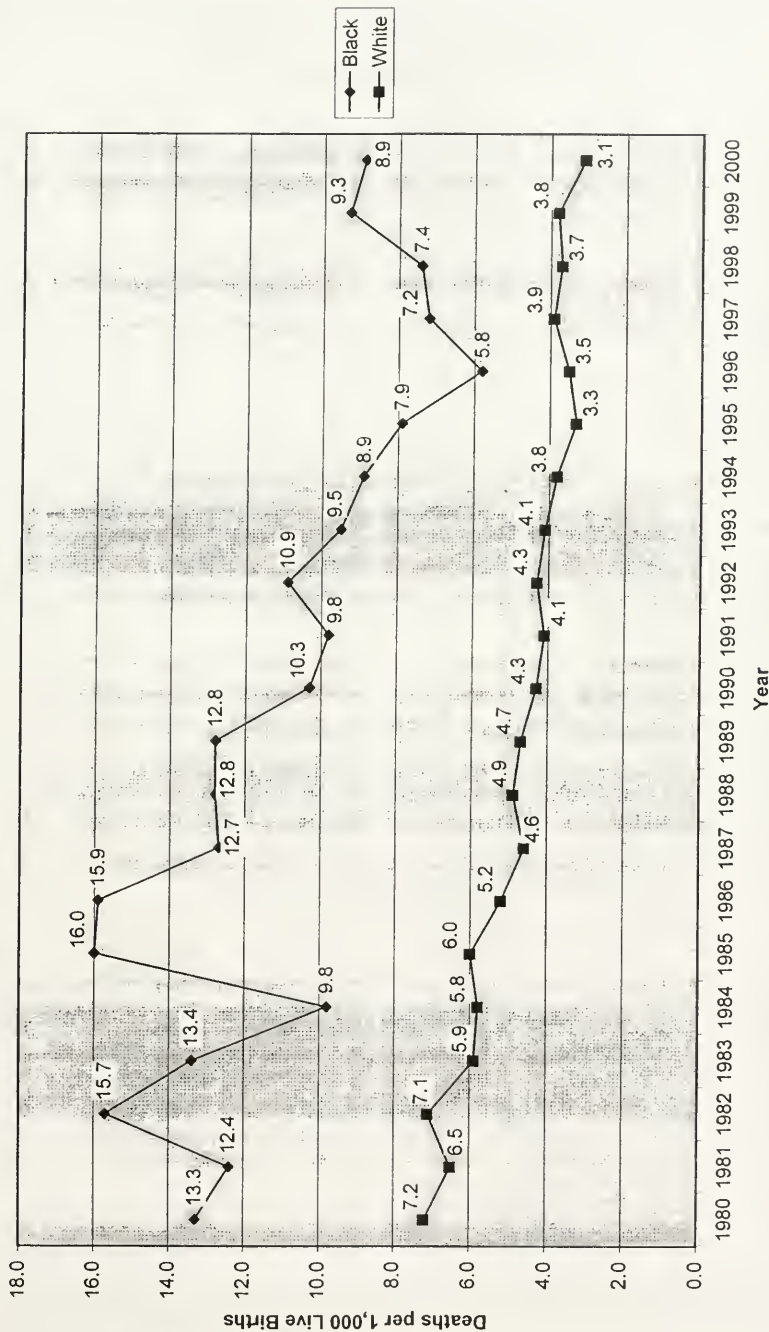
POST-NEONATAL MORTALITY RATE (PNMR)  $\frac{\# \text{ of Resident Deaths at Least 28 Days Old but } < 365 \text{ Days Old} \times 1,000}{\text{Total Resident Live Births}}$

Figure D-1. Infant Mortality Rates by Race<sup>1</sup>, Massachusetts 1980-2000



1. Race groups include Hispanic ethnicity.

Figure D-2. Neonatal Mortality Rates by Race<sup>1</sup>, Massachusetts: 1980-2000



1. Race groups include Hispanic ethnicity.

**Table D-1. Trends in Infant, Neonatal, and Post-Neonatal Mortality by Race and Hispanic Ethnicity, Massachusetts: 1991-2000**

<b>INFANT MORTALITY (less than one year of age)</b>												
State Total <sup>1</sup>			White, non-Hispanic		Black, non-Hispanic		Hispanic		Asian/Pacific Islander, non-Hispanic		Other <sup>2</sup>	
Year	#	Rate <sup>3</sup>	#	Rate <sup>3</sup>	#	Rate <sup>3</sup>	#	Rate <sup>3</sup>	#	Rate <sup>3</sup>	#	Rate <sup>3</sup>
1991	577	6.5	381	5.5	101	15.0	80	9.4	14	4.2	1	-- <sup>4</sup>
1992	569	6.5	371	5.5	110	16.4	67	7.9	16	4.9	5	5.1
1993	523	6.2	346	5.3	84	13.1	77	9.3	13	3.9	3	-- <sup>4</sup>
1994	499	6.0	343	5.3	79	12.6	64	7.6	8	2.4	5	5.3
1995	419	5.1	275	4.4	65	11.1	58	7.2	19	5.5	2	-- <sup>4</sup>
1996	403	5.0	289	4.7	63	11.4	40	5.1	8	2.2	2	-- <sup>4</sup>
1997	425	5.3	294	4.8	64	11.7	55	6.7	10	2.6	2	-- <sup>4</sup>
1998	414	5.1	287	4.6	59	10.6	58	6.7	10	2.7	0	0.0
1999	418	5.2	285	4.7	72	12.3	49	5.5	8	1.9	4	-- <sup>4</sup>
2000	377	4.6	232	3.8	74	12.8	48	5.2	19	4.1	4	-- <sup>4</sup>

<b>NEONATAL MORTALITY (birth to 27days)</b>												
State Total <sup>1</sup>			White, non-Hispanic		Black, non-Hispanic		Hispanic		Asian/Pacific Islander, non-Hispanic		Other <sup>2</sup>	
Year	#	Rate <sup>3</sup>	#	Rate <sup>3</sup>	#	Rate <sup>3</sup>	#	Rate <sup>3</sup>	#	Rate <sup>3</sup>	#	Rate <sup>3</sup>
1991	401	4.5	266	3.9	72	10.7	53	6.2	10	3.0	0	0.0
1992	415	4.8	274	4.0	76	11.4	51	6.0	10	3.0	4	-- <sup>4</sup>
1993	375	4.4	245	3.7	64	10.0	55	6.7	9	2.7	2	-- <sup>4</sup>
1994	349	4.2	240	3.7	58	9.3	40	4.7	7	2.1	4	-- <sup>4</sup>
1995	298	3.6	198	3.1	50	8.5	39	4.8	10	2.9	1	-- <sup>4</sup>
1996	290	3.6	222	3.6	34	6.2	27	3.5	5	1.4	1	-- <sup>4</sup>
1997	323	4.0	228	3.7	44	8.0	43	5.2	7	1.8	1	-- <sup>4</sup>
1998	315	3.9	218	3.5	47	8.5	43	5.0	7	1.9	0	0.0
1999	332	4.1	226	3.7	58	9.9	39	4.4	5	1.2	4	-- <sup>4</sup>
2000	288	3.5	177	2.9	57	9.9	37	4.0	14	3.0	3	-- <sup>4</sup>

<b>POST-NEONATAL MORTALITY (28-365 days)</b>												
State Total <sup>1</sup>			White, non-Hispanic		Black, Non-Hispanic		Hispanic		Asian/Pacific Islander, non-Hispanic		Other <sup>2</sup>	
Year	#	Rate <sup>3</sup>	#	Rate <sup>3</sup>	#	Rate <sup>3</sup>	#	Rate <sup>3</sup>	#	Rate <sup>3</sup>	#	Rate <sup>3</sup>
1991	176	2.0	115	1.7	29	4.3	27	3.2	4	-- <sup>4</sup>	1	-- <sup>4</sup>
1992	154	1.8	97	1.4	34	5.1	16	1.9	6	1.8	1	-- <sup>4</sup>
1993	148	1.7	101	1.5	20	3.1	22	2.7	4	-- <sup>4</sup>	1	-- <sup>4</sup>
1994	150	1.8	103	1.6	21	3.3	24	2.8	1	-- <sup>4</sup>	1	-- <sup>4</sup>
1995	121	1.5	77	1.2	15	2.6	19	2.3	9	2.6	1	-- <sup>4</sup>
1996	113	1.4	67	1.1	29	5.3	13	1.7	3	-- <sup>4</sup>	1	-- <sup>4</sup>
1997	102	1.3	66	1.1	20	3.7	12	1.5	3	-- <sup>4</sup>	1	-- <sup>4</sup>
1998	99	1.2	69	1.1	12	2.2	15	1.7	3	-- <sup>4</sup>	0	0.0
1999	86	1.1	59	1.0	14	2.4	10	1.1	3	-- <sup>4</sup>	0	0.0
2000	89	1.1	55	0.9	17	2.9	11	1.2	5	1.1	1	-- <sup>4</sup>

1. Deaths of infants of unknown race are included in the total calculation. For rate computations, births of infants of unknown race are allocated into the race categories according to the distribution of births of known race. 2. Other: American Indian and Other races. 3. Rates are expressed per 1,000 live births. 4. Calculations based on fewer than five events are excluded.



Table D-2. Trends in Infant, Neonatal, and Post-Neonatal Mortality, by Race and Hispanic Ethnicity, Massachusetts: 1990-2000

INFANT MORTALITY												
Year	State Total <sup>1</sup>		White, Non-Hispanic		Black, Non-Hispanic		Hispanic		Asian		Other <sup>2</sup>	
	n	Rate <sup>3</sup>	n	Rate <sup>3</sup>	n	Rate <sup>3</sup>	n	Rate <sup>3</sup>	n	Rate <sup>3</sup>	n	Rate <sup>3</sup>
1990	649	7.0	442	6.1	98	13.7	77	9.1	24	7.0	8	9.5
1991	577	6.5	381	5.5	101	15.0	80	9.4	14	4.2	1	-- <sup>4</sup>
1992	569	6.5	371	5.5	110	16.4	67	7.9	16	4.9	5	5.1
1993	523	6.2	346	5.3	84	13.1	77	9.3	13	3.9	3	-- <sup>4</sup>
1994	499	6.0	343	5.3	79	12.6	64	7.6	8	2.4	5	5.3
1995	419	5.1	275	4.4	65	11.1	58	7.2	19	5.5	2	-- <sup>4</sup>
1996	403	5.0	289	4.7	63	11.4	40	5.1	8	2.2	2	-- <sup>4</sup>
1997	425	5.3	294	4.8	64	11.7	55	6.7	10	2.6	2	-- <sup>4</sup>
1998	414	5.1	287	4.6	59	10.6	58	6.7	10	2.7	0	0.0
1999	418	5.2	285	4.7	72	12.3	49	5.5	8	1.9	4	-- <sup>4</sup>
2000	377	4.6	232	3.8	74	12.8	48	5.2	19	4.1	4	-- <sup>4</sup>
NEONATAL MORTALITY												
Year	State Total <sup>1</sup>		White, Non-Hispanic		Black, Non-Hispanic		Hispanic		Asian		Other <sup>2</sup>	
	n	Rate <sup>3</sup>	n	Rate <sup>3</sup>	n	Rate <sup>3</sup>	n	Rate <sup>3</sup>	n	Rate <sup>3</sup>	n	Rate <sup>3</sup>
1990	446	4.8	298	4.1	75	10.5	49	5.8	19	5.5	5	5.5
1991	401	4.5	266	3.9	72	10.7	53	6.2	10	3.0	0	0.0
1992	415	4.8	274	4.0	76	11.4	51	6.0	10	3.0	4	-- <sup>4</sup>
1993	375	4.4	245	3.7	64	10.0	55	6.7	9	2.7	2	-- <sup>4</sup>
1994	349	4.2	240	3.7	58	9.3	40	4.7	7	2.1	4	-- <sup>4</sup>
1995	298	3.6	198	3.1	50	8.5	39	4.8	10	2.9	1	-- <sup>4</sup>
1996	290	3.6	222	3.6	34	6.2	27	3.5	5	1.4	1	-- <sup>4</sup>
1997	323	4.0	228	3.7	44	8.0	43	5.2	7	1.8	1	-- <sup>4</sup>
1998	315	3.9	218	3.5	47	8.5	43	5.0	7	1.9	0	0.0
1999	332	4.1	226	3.7	58	9.9	39	4.4	5	1.2	4	-- <sup>4</sup>
2000	288	3.5	177	2.9	57	9.9	37	4.0	14	3.0	3	-- <sup>4</sup>
POST NEONATAL MORTALITY												
Year	State Total <sup>1</sup>		White, Non-Hispanic		Black, Non-Hispanic		Hispanic		Asian		Other <sup>2</sup>	
	n	Rate <sup>3</sup>	n	Rate <sup>3</sup>	n	Rate <sup>3</sup>	n	Rate <sup>3</sup>	n	Rate <sup>3</sup>	n	Rate <sup>3</sup>
1990	203	2.2	144	2.0	23	3.2	28	3.3	5	1.5	3	-- <sup>4</sup>
1991	176	2.0	115	1.7	29	4.3	27	3.2	4	-- <sup>4</sup>	1	-- <sup>4</sup>
1992	154	1.8	97	1.4	34	5.1	16	1.9	6	1.8	1	-- <sup>4</sup>
1993	148	1.7	101	1.5	20	3.1	22	2.7	4	-- <sup>4</sup>	1	-- <sup>4</sup>
1994	150	1.8	103	1.6	21	3.3	24	2.8	1	-- <sup>4</sup>	1	-- <sup>4</sup>
1995	121	1.5	77	1.2	15	2.6	19	2.3	9	2.6	1	-- <sup>4</sup>
1996	113	1.4	67	1.1	29	5.3	13	1.7	3	-- <sup>4</sup>	1	-- <sup>4</sup>
1997	102	1.3	66	1.1	20	3.7	12	1.5	3	-- <sup>4</sup>	1	-- <sup>4</sup>
1998	99	1.2	69	1.1	12	2.2	15	1.7	3	-- <sup>4</sup>	0	0.0
1999	86	1.1	59	1.0	14	2.4	10	1.1	3	-- <sup>4</sup>	0	0.0
2000	89	1.1	55	0.9	17	2.9	11	1.2	5	1.1	1	-- <sup>4</sup>

1. Deaths of infants of unknown race are included in the total calculation. For rate computations, births of infants of unknown race are allocated into the race categories according to the distribution of births of known race. 2. Other: American Indian and Other races. 3. Rates are expressed per 1,000 live births. 4. Calculations based on fewer than five events are excluded.

Table D-3. Infant, Neonatal, and Post Neonatal Deaths by Cause, Massachusetts: 2000

Cause of Death <sup>1</sup>	ICD-10 Code	Infant (<1 year)		Neonatal (<28 days)		Post-Neonatal (28-365 days)	
		#	% <sup>2,3</sup>	#	% <sup>2,3</sup>	#	% <sup>2,3</sup>
<b>TOTAL</b>		<b>377</b>	<b>100%</b>	<b>288</b>	<b>100%</b>	<b>89</b>	<b>100%</b>
Infectious and parasitic diseases	A00-B99	5	1.3	2	--	3	--
Cancer	C00-C97	4	--	0	0.0	4	--
Diseases of the blood and blood forming organs (anemia)	D50-D89	0	0.0	0	0.0	0	0.0
Diseases of nervous system and ear	G00-G98	10	2.7	0	0.0	10	11.2
Diseases of the respiratory system	J00-J98	5	1.3	1	--	4	--
Diseases of digestive system	K00-K92	8	2.1	0	0.0	8	9.0
Congenital malformations	Q00-Q99	57	15.1	43	14.9	14	15.7
Congenital malformations of nervous system	Q00-Q07	9	2.4	6	2.1	3	--
Anencephalus and similar malformations	Q00	5	1.3	5	1.7	0	0.0
Congenital malformations of eye, ear, face, and neck	Q10-Q18	0	0.0	0	0.0	0	0.0
Congenital malformations of heart	Q20-Q24	15	4.0	9	3.1	6	6.7
Other congenital malformations of circulatory system	Q25-Q28	4	--	3	--	1	--
Congenital malformations of respiratory system	Q30-Q34	8	2.1	8	2.8	0	0.0
Cleft palate and other digestive tract malformations	Q35-Q45	0	0.0	0	0.0	0	0.0
Congenital malformations of genitourinary system	Q50-Q64	3	--	3	--	0	0.0
Congenital malformations of musculoskeletal system	Q65-Q85	2	--	2	--	0	0.0
Chromosomal abnormalities	Q90-Q99	13	3.5	9	3.1	4	--
Certain conditions originating in the perinatal period	P00-P96	<b>229</b>	<b>60.7</b>	<b>227</b>	<b>78.8</b>	<b>2</b>	<b>--</b>
Newborn affected by maternal conditions which may be unrelated to present pregnancy	P00	0	0.0	0	0.0	0	0.0
Newborn affected by maternal complications of pregnancy	P01	31	8.2	31	10.8	0	0.0
Newborn affected by complications of placenta, cord and membrane	P02	9	2.4	9	3.1	0	0.0
Newborn affected by other complications of labor and delivery	P03	4	--	4	--	0	0.0
Disorders relating to short gestation and low birthweight	P07	80	21.2	80	27.8	0	0.0
Birth trauma	P10-P15	0	0.0	0	0.0	0	0.0
Intrauterine hypoxia and birth asphyxia	P20-P21	12	3.2	12	4.2	0	0.0
Respiratory distress of newborn	P22	14	3.7	14	4.9	0	0.0
Other respiratory conditions of newborn	P23-P28	20	5.3	19	6.6	1	--
Infections specific to the perinatal period	P35-P39	9	2.4	9	3.1	0	0.0
Neonatal hemorrhage	P50-P52, P54	10	2.7	10	3.5	0	0.0
Other and ill-defined conditions originating in the perinatal period	P90-P96	4	--	4	--	0	0.0
Symptoms, signs, and ill-defined conditions	R00-R99	30	8.0	4	--	26	29.2
Sudden Infant Death Syndrome (SIDS)	R95	26	6.9	3	--	23	25.8
Unintentional Injuries	V01-X59	6	1.6	1	--	5	5.6
Homicide	X85-Y09	2	--	1	--	1	--
All other causes	Residual	21	5.6	9	3.1	12	13.5

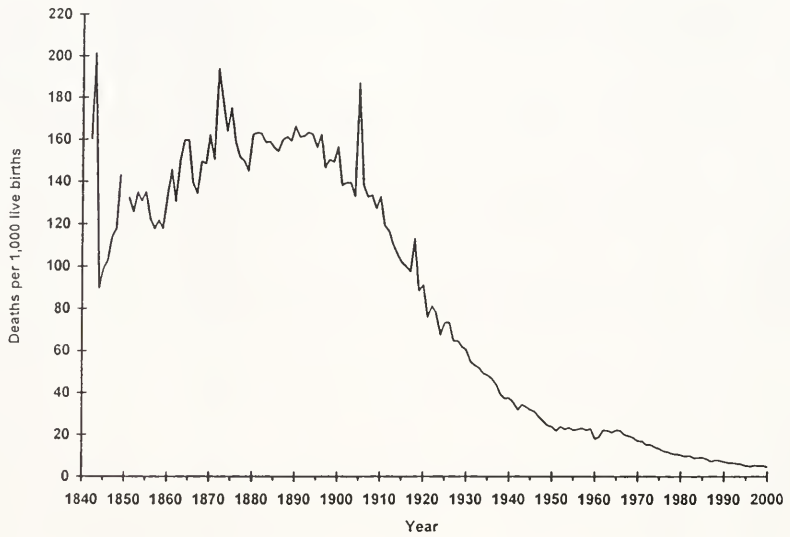
1. Please refer to page 122 for an explanation of ICD-10 codes. 2. Percents not calculated for subcategories. 3. Calculations based on fewer than five events are excluded.

Table D-4. Infant Deaths by Major Causes, Race and Hispanic Ethnicity,  
Massachusetts: 2000

Cause of Death <sup>2</sup>	ICD-10 Code	White, non- Hispanic <sup>1</sup>		Black, non- Hispanic <sup>1</sup>		Asian/Pacific Islander, non- Hispanic <sup>1</sup>		Hispanic	
		#	%	#	%	#	%	#	%
<b>TOTAL</b>		232	100%	74	100%	19	100%	48	100%
Congenital malformations	Q00-Q99	37	15.9	12	16.2	3	-- <sup>3</sup>	4	-- <sup>3</sup>
Certain conditions originating in the perinatal period	P00-P96	137	59.1	45	60.8	10	52.6	34	70.8
Symptoms, signs, and ill-defined conditions	R00-R99	17	7.3	7	9.5	2	-- <sup>3</sup>	4	-- <sup>3</sup>
Unintentional Injuries	V01-X59	2	-- <sup>3</sup>	4	-- <sup>3</sup>	0	0.0	0	0.0
Homicide	X85-Y09	2	-- <sup>3</sup>	0	0.0	0	0.0	0	0.0
All other causes	Residual	37	15.9	6	8.1	4	-- <sup>3</sup>	6	12.5

1. Race and ethnicity data in this table are presented as mutually exclusive categories and Cape Verdeans are not included with Blacks. Persons of Hispanic ethnicity are not included in a race category. 2. Deaths are coded according to ICD-10. 3. Calculations based on fewer than five events are excluded.

Figure D-3. Infant Mortality Rates, Massachusetts: 1842-2000



## MARRIAGES & DIVORCES



## SECTION E

### MARRIAGES AND DIVORCES

Marriage and divorce tables are organized by place of occurrence in Massachusetts. For example, if two Boston residents are married in Barnstable, this marriage will be reported by place of occurrence (Barnstable) rather than the residence of the couple (Boston). Marriages have traditionally been reported in this manner because of the number of couples who live in different communities. Additionally, out-of-state residents who marry in Massachusetts are included in these data.

Marriages and divorces which involve Massachusetts residents, but occur in other states, are not included in these figures. No system of interstate exchange exists for these events. Unlike some states, Massachusetts marriage and divorce laws neither encourage out-of-state residents to come to the state nor discourage residents from using the Massachusetts system by imposing long waiting periods, etc. This allows the marriage data to be used to estimate resident marriages.

In 2000, 38,603 marriages occurred in Massachusetts compared to 39,410 in 1999, a decrease of 2.0%. The rate of marriages was at 6.2 per 1,000 population in 1999 and this rate was 6.1 in 2000. The 2000 US rate of marriages per 1,000 population was 8.3, roughly equivalent to the 1999 US rate of 8.3. Of all brides in Massachusetts in 2000, 73.5% had never previously been married. This percentage was slightly lower among the grooms--72.1%.

In 2000, 15,980 divorces were granted in Massachusetts, an increase of 2.2% from the 15,632 divorces granted in 1999. The 2000 rate of divorce per 1,000 population in Massachusetts was 2.5 roughly equivalent to the 1999 divorce rate of 2.5. This rate was well below the 2000 US rate of 3.9 divorces per 1,000 population.

#### RATES IMPORTANT FOR THIS SECTION INCLUDE:

MARRIAGE RATE  $\frac{\text{Number of Occurrence Marriages}}{\text{Total Population}} \times 1,000$

DIVORCE RATE  $\frac{\text{Number of Occurrence Divorces}}{\text{Total Population}} \times 1,000$

Figure E-1. Rates of Marriages and Divorces per 1,000 Population, Selected Years  
Massachusetts: 1900-2000

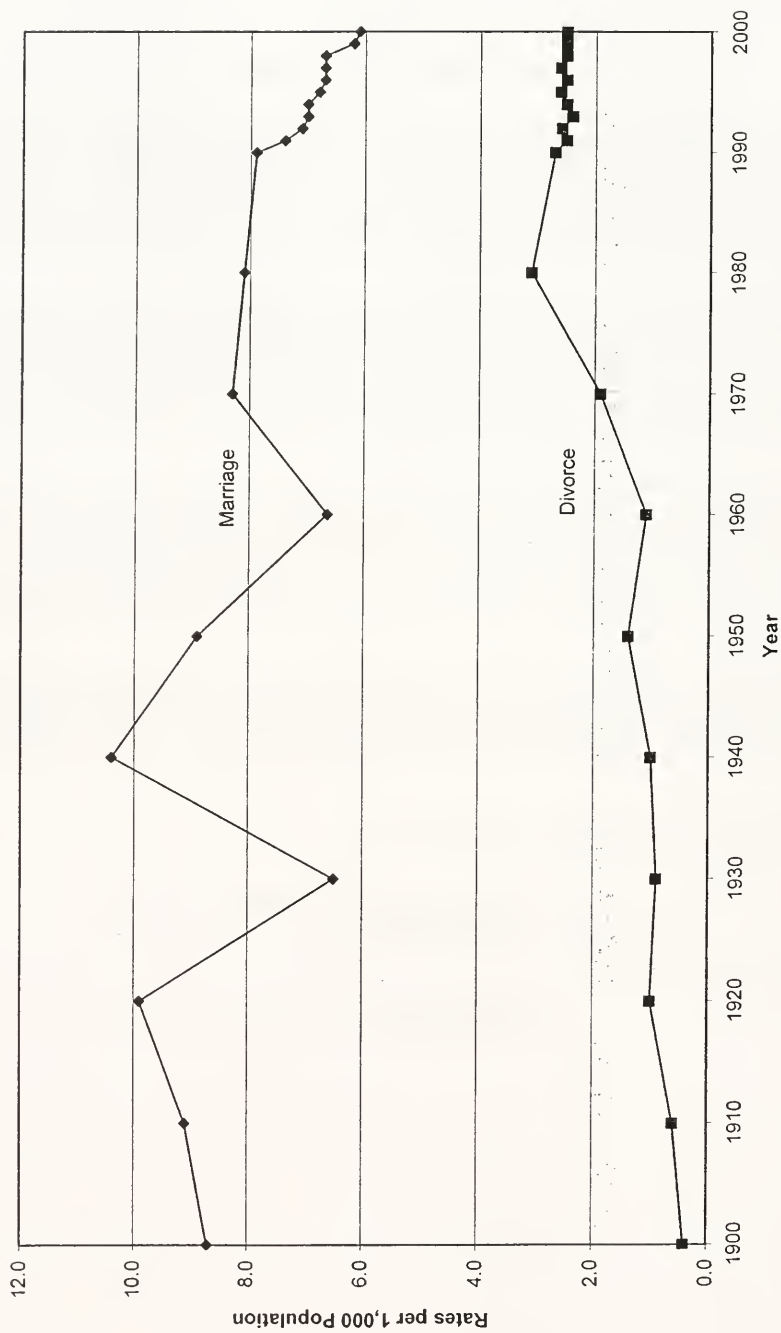




Table E-1. Marriages and Divorces by County

Massachusetts Occurrence: 2000

	<u>Marriages</u>	<u>Divorces</u>
State Total	38,603	15,980
<u>Counties</u>		
Barnstable	2,454	511
Bershire	966	351
Bristol	3,080	1,501
Dukes	456	60
Essex	4,626	2,134
Franklin	386	304
Hampden	2,729	1,313
Hampshire	802	403
Middlesex	7,800	2,853
Nantucket	320	43
Norfolk	3,490	1,423
Plymouth	2,695	1,394
Suffolk	4,237	1,242
Worcester	4,562	2,448

Table E-2. Marriages and Divorces and Rates per 1,000 Population

## Massachusetts Occurrence, Selected Years: 1900-2000

Year	<u>Marriages</u>		<u>Divorces</u>	
	Number	Rate	Number	Rate
1900	24,342	8.7	1,258	0.4
1905	27,184	9.1	1,554	0.5
1910	30,710	9.1	1,929	0.6
1915	31,301	8.5	2,252	0.6
1920	38,048	9.9	3,647	1.0
1925	31,238	7.5	3,395	0.8
1930	27,431	6.5	3,746	0.9
1935	30,019	6.9	4,081	0.9
1940	44,836	10.4	4,502	1.0
1945	38,197	8.5	6,833	1.5
1950	41,711	8.9	6,365	1.4
1955	35,585	7.3	5,601	1.2
1960	34,050	6.6	5,592	1.1
1965	38,281	7.2	7,728	1.5
1970	47,292	8.3	10,818	1.9
1975	42,103	7.3	16,460	2.8
1980	46,273	8.1	17,873	3.1
1985	49,849	8.6	21,573	3.7
1986	49,990	8.6	19,809	3.4
1987	49,034	8.4	16,994	2.9
1988	49,941	8.5	17,676	3.0
1989	49,174	8.4	16,819	2.9
1990	47,786	7.9	16,258	2.7
1991	44,621	7.4	14,987	2.5
1992	43,228	7.1	15,411	2.5
1993	42,355	7.0	14,435	2.4
1994	42,503	7.0	15,450	2.5
1995	41,522	6.8	15,772	2.6
1996	41,234	6.7	15,485	2.5
1997	41,528	6.7	15,942	2.6
1998	38,722	6.2	16,010	2.6
1999	39,410	6.2	15,632	2.5
2000	38,603	6.1	15,980	2.5

Table E-3. Marriages by Age and Marital Status

Massachusetts Occurrence: 2000

Bride

Age	Total Number	%	Single Number	%	Widowed Number	%	Divorced Number	%
Total	38,599	100.0%	28,357	73.5%	841	2.2%	9,401	24.4%
<20	967	100.0%	963	99.6%	0	0.0%	4	0.4%
20-29	18,661	100.0%	17,669	94.7%	18	0.1%	974	5.2%
30-39	12,501	100.0%	8,278	66.2%	131	1.0%	4,092	32.7%
40-49	4,400	100.0%	1,232	28.0%	213	4.8%	2,955	67.2%
50-59	1,546	100.0%	173	11.2%	226	14.6%	1,147	74.2%
60-69	388	100.0%	32	8.2%	157	40.5%	199	51.3%
70+	136	100.0%	10	7.4%	96	70.6%	30	22.1%

Groom

Age	Total Number	%	Single Number	%	Widowed Number	%	Divorced Number	%
Total	38,599	100.0%	27,807	72.0%	828	2.1%	9,964	25.8%
<20	301	100.0%	301	100.0%	0	0.0%	0	0.0%
20-29	15,126	100.0%	14,605	96.6%	6	0.0%	515	3.4%
30-39	14,376	100.0%	10,730	74.6%	53	0.4%	3,593	25.0%
40-49	5,439	100.0%	1,843	33.9%	102	1.9%	3,494	64.2%
50-59	2,280	100.0%	271	11.9%	206	9.0%	1,803	79.1%
60-69	746	100.0%	47	6.3%	225	30.2%	474	63.5%
70+	331	100.0%	10	3.0%	236	71.3%	85	25.7%

4 values missing for each age.

Table E-4. Number of Marriages by Age of Bride and Age of Groom								
Massachusetts Occurrence: 2000								
Age of Bride	Age of Groom							
	Total	<20	20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70+
Total	38,599	301	15,126	14,376	5,439	2,280	746	331
<20	967	200	680	72	12	3	0	0
20-29	18,661	92	12,512	5,512	497	42	4	2
30-39	12,501	9	1,847	7,772	2,435	402	32	4
40-49	4,400	0	83	968	2,171	995	158	25
50-59	1,546	0	3	50	311	771	346	65
60-69	388	0	1	2	13	66	185	121
70+	136	0	0	0	0	1	21	114

4 values were missing.

Table E-5. Number of Marriages for Bride by Number of Marriages for Groom							
Massachusetts Occurrence: 2000							
		Number of Marriages Groom					
Bride		Total	1	2	3	4	5+
	Total	38,603	28,370	8,481	1,503	221	28
	1	27,815	23,912	3,496	362	39	6
	2	8,973	3,990	4,021	829	119	14
	3	1,612	423	865	275	44	5
	4	177	42	86	30	18	1
	5+	26	3	13	7	1	2

## POPULATION



## SECTION F

### POPULATION

The population data in this section are presented for use in computing rates for small areas and for reporting changes over time by municipality and county. They are based primarily on the US Federal Census for 2000.

All additional interpolations and calculations have been provided by Bruce B. Cohen and James West, Division of Research and Epidemiology, Center for Health Information, Statistics, Research and Evaluation, Massachusetts Department of Public Health.

In 2000, there were an estimated 6,349,097 residents of Massachusetts. This represents a 7.0% increase in population since 1987, when the population numbered 5,932,611. Among the total 2000 population in Massachusetts, 48.2% were male, 26.4% were below the age of 20, and 6.8% were over 75 years of age.

Figure F-1. Massachusetts Population: 1900-2000

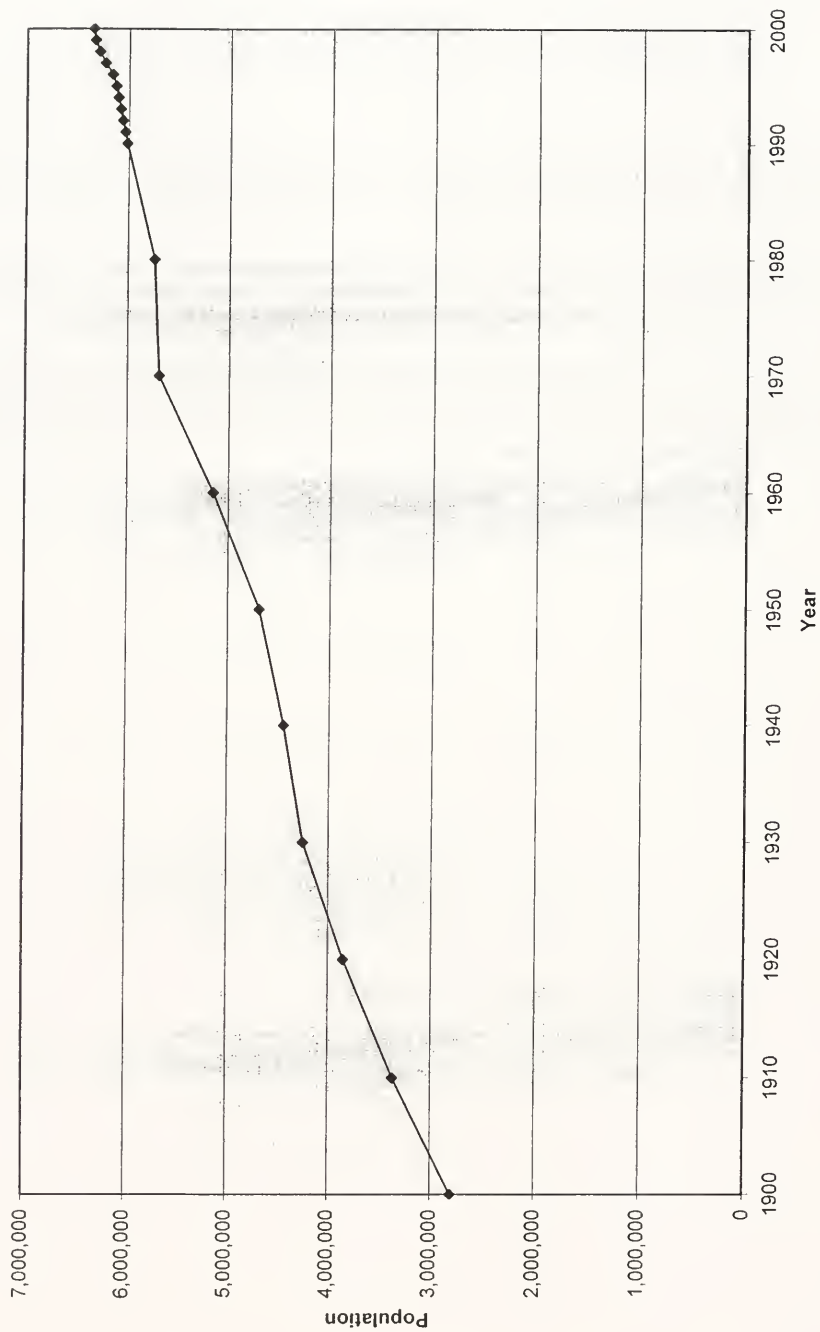




Table F-1. Population Estimates<sup>1</sup> by Race<sup>2</sup>, Ethnicity<sup>3</sup>, Age, and Sex, Massachusetts: 2000

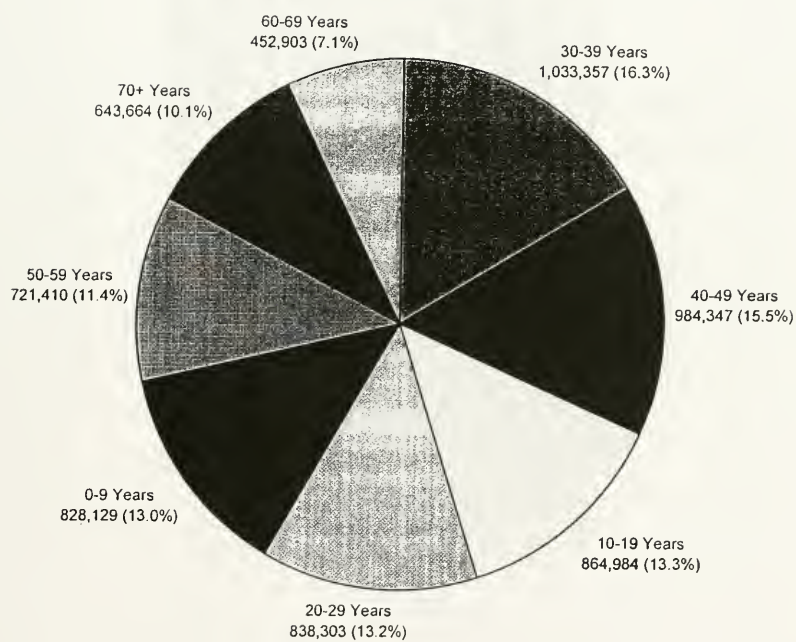
Age	Sex	White,		Black,	Asian,	Hispanic	Other
		Total	Non-Hispanic	Non-Hispanic	Non-Hispanic		
Under 1	Male	40,562	31,453	2,688	1,786	4,576	59
	Female	38,802	29,928	2,573	1,821	4,421	59
	Total	79,364	61,381	5,261	3,607	8,997	118
1-4	Male	162,500	125,841	10,818	7,194	18,326	321
	Female	155,404	119,721	10,352	7,327	17,689	315
	Total	317,904	245,562	21,170	14,521	36,015	636
5-9	Male	221,145	171,780	15,842	8,806	24,219	498
	Female	209,716	162,576	15,111	8,594	22,960	475
	Total	430,861	334,356	30,953	17,400	47,179	973
10-14	Male	221,168	175,195	15,402	8,371	21,724	476
	Female	210,079	165,837	14,905	7,987	20,901	449
	Total	431,247	341,032	30,307	16,358	42,625	925
15-19	Male	210,460	165,187	14,205	9,820	20,791	457
	Female	205,277	161,017	13,559	10,458	19,793	450
	Total	415,737	326,204	27,764	20,278	40,584	907
20-24	Male	198,756	151,645	13,069	12,017	21,592	433
	Female	205,523	156,538	13,741	13,583	21,235	426
	Total	404,279	308,183	26,810	25,600	42,827	859
25-29	Male	213,376	165,334	12,638	14,723	20,269	412
	Female	220,648	171,137	13,785	14,962	20,353	411
	Total	434,024	336,471	26,423	29,685	40,622	823
30-34	Male	242,386	195,842	13,635	12,950	19,527	432
	Female	250,378	202,104	14,746	12,863	20,225	440
	Total	492,764	397,946	28,381	25,813	39,752	872
35-39	Male	266,507	223,366	14,197	11,163	17,287	494
	Female	274,086	229,337	15,242	10,763	18,228	516
	Total	540,593	452,703	29,439	21,926	35,515	1,010
40-44	Male	255,838	220,532	12,836	8,795	13,158	517
	Female	266,564	229,263	13,572	9,062	14,140	527
	Total	522,402	449,795	26,408	17,857	27,298	1,044
45-49	Male	225,029	197,986	9,981	7,063	9,558	441
	Female	236,916	207,183	10,990	7,626	10,663	454
	Total	461,945	405,169	20,971	14,689	20,221	895
50-54	Male	199,205	178,244	8,001	5,408	7,180	372
	Female	212,203	188,557	9,059	5,793	8,426	368
	Total	411,408	366,801	17,060	11,201	15,606	740

Table F-1. (Continued) Population Estimates<sup>1</sup> by Race<sup>2</sup>, Ethnicity<sup>3</sup>, Age, and Sex, Massachusetts: 2000

Age	Sex	White,		Black,		Asian,		Hispanic	Other
		Total	Non-Hispanic	Non-Hispanic	Non-Hispanic	Non-Hispanic	Non-Hispanic		
55-59	Male	148,841	134,453	5,667	3,771	4,712	238		
	Female	161,161	144,486	6,975	3,885	5,555	260		
	Total	310,002	278,939	12,642	7,656	10,267	498		
60-64	Male	111,504	100,899	4,201	2,968	3,256	180		
	Female	124,901	112,147	5,364	3,078	4,162	150		
	Total	236,405	213,046	9,565	6,046	7,418	330		
65-69	Male	98,882	91,089	3,191	2,298	2,172	132		
	Female	117,616	107,623	4,339	2,547	2,979	128		
	Total	216,498	198,712	7,530	4,845	5,151	260		
70-74	Male	91,416	85,724	2,504	1,594	1,482	112		
	Female	119,916	112,022	3,622	1,970	2,182	120		
	Total	211,332	197,746	6,126	3,564	3,664	232		
75-79	Male	73,829	70,048	1,697	1,059	939	86		
	Female	111,112	105,358	2,865	1,371	1,428	90		
	Total	184,941	175,406	4,562	2,430	2,367	176		
80-84	Male	46,464	44,465	953	496	515	35		
	Female	84,235	80,571	1,904	771	915	74		
	Total	130,699	125,036	2,857	1,267	1,430	109		
85+	Male	30,948	29,488	669	352	418	21		
	Female	85,744	82,609	1,656	644	773	62		
	Total	116,692	112,097	2,325	996	1,191	83		
Total	Male	3,058,816	2,558,571	162,194	120,634	211,701	5,716		
	Female	3,290,281	2,768,014	174,360	125,105	217,028	5,774		
	Total	6,349,097	5,326,585	336,554	245,739	428,729	11,490		

1. MDPH 2000 Preliminary Population Estimates (released January 2002). 2. The age-gender-race distributions from the from the 2000 US Census (MARS) file were applied to the 1999 population estimates to separate Asians from the combined category of Asians and American Indians. 3. Persons of Hispanic Ethnicity are NOT included in the race categories. These estimates are used to calculate populationbased rates in this report.

Figure F-2. 2000 Massachusetts Population by Age Group



**Figure F-3. 2000 Massachusetts Population by Race**

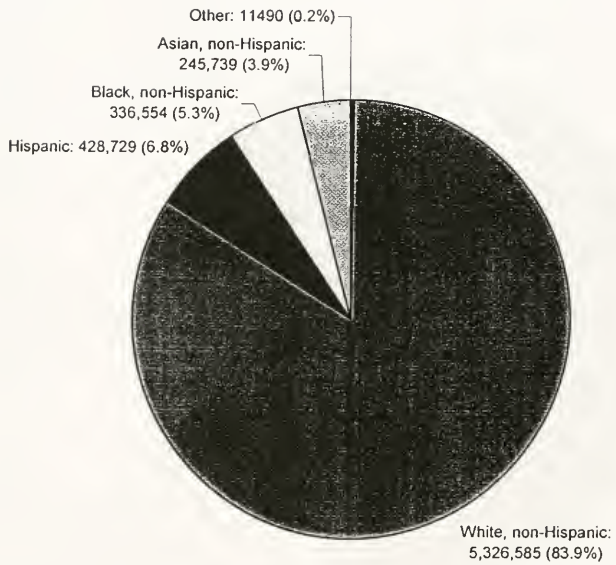
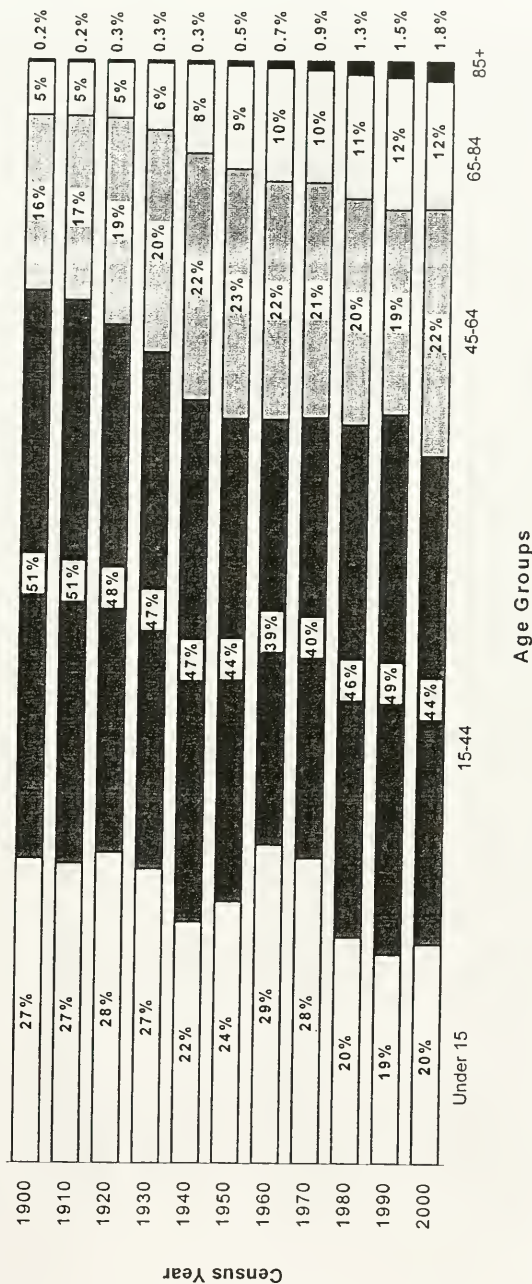


Figure F-4

# Changes in Age Composition of the Population Massachusetts: 1900-2000



Source: US Census Bureau 1900-2000.  
Note: Percentages based on counts with known age.

Table F-2. Massachusetts Population by County: 1930-2000									
State	1930	1940	1950	1960	1970	1980	1990	2000	
Barnstable	4,249,614	4,316,721	4,690,514	5,148,578	5,689,170	5,737,037	6,016,425	6,349,097	
Berkshire	32,305	37,295	46,805	70,286	96,656	147,925	186,605	222,230	
Bristol	120,700	122,273	132,966	142,135	149,402	145,110	139,352	134,953	
Dukes	364,590	364,637	381,569	398,488	444,301	474,641	506,325	534,678	
Essex	4,953	5,669	5,633	5,829	6,117	8,942	11,639	14,967	
Franklin	498,040	496,313	522,384	568,831	637,887	633,632	670,080	723,419	
Hampden	49,612	49,453	52,747	54,864	59,210	64,317	70,092	71,535	
Hampshire	335,496	332,107	367,971	429,353	459,050	443,018	456,310	456,228	
Middlesex	72,801	72,461	87,594	103,229	123,981	138,813	146,568	152,251	
Nantucket	934,924	971,390	1,064,569	1,238,742	1,397,268	1,367,034	1,398,468	1,465,396	
Norfolk	3,678	3,401	3,484	3,559	3,774	5,087	6,012	9,520	
Plymouth	299,426	325,180	392,308	510,256	605,051	606,587	616,087	650,308	
Suffolk	162,311	168,824	189,468	248,449	333,314	405,437	435,276	472,822	
Worcester	879,536	863,248	896,615	791,329	735,190	650,142	663,906	689,807	
	491,242	504,470	546,401	583,228	637,969	646,352	709,705	750,963	

Data taken from the United States Census



**Table F-3. Massachusetts Population by City and Town: 1980, 1990, and 2000 US Census**

City/Town	1980	1990	2000	City/Town	1980	1990	2000
ABINGTON	13,517	13,817	15,111	CAMBRIDGE	95,322	95,802	98,868
ACTON	17,544	17,872	20,189	CANTON	18,182	18,530	20,530
ACUSHNET	8,704	9,554	10,604	CARLISLE	3,306	4,333	4,634
ADAMS	10,381	9,445	8,829	CARVER	6,988	10,590	11,414
AGAWAM	26,271	27,323	28,845	CHARLEMONT	1,149	1,249	1,325
ALFORD	394	418	417	CHARLTON	6,719	9,576	11,242
AMESBURY	13,971	14,997	16,271	CHATHAM	6,071	6,579	6,728
AMHERST	33,229	35,228	37,891	CHELMSFORD	31,174	32,383	34,524
ANDOVER	26,370	29,151	31,590	CHELSEA	25,431	28,710	31,956
ANDOVER HEAD)	220	201	314	CHESHIRE	3,124	3,479	3,657
ARLINGTON	48,219	44,630	42,776	CHESTER	1,123	1,280	1,402
ASHBURNHAM	4,075	5,433	5,948	CHESTERFIELD	1,000	1,048	1,162
ASHBY	2,311	2,717	2,793	CHICOPÉE	55,112	56,632	53,873
ASHFIELD	1,458	1,715	1,849	CHILMARK	489	650	818
ASHLAND	9,165	12,066	14,415	CLARKSBURG	1,871	1,745	1,772
ATHOL	10,634	11,451	11,330	CLINTON	12,771	13,222	13,508
ATTLEBORO	34,196	38,383	41,282	COHASSET	7,174	7,075	7,463
AUBURN	14,845	15,005	15,783	COLRAIN	1,552	1,757	1,825
AVON	5,026	4,558	4,460	CONCORD	16,293	17,076	18,271
AYER	6,993	6,871	6,288	CONWAY	1,213	1,529	1,811
BARNSTABLE	30,898	40,949	47,188	CUMMINGTON	657	785	917
BARRE	4,102	4,546	5,144	DALTON	6,797	7,155	6,876
BECKET	1,339	1,481	1,754	DANVERS	24,100	24,174	25,523
BEDFORD	13,067	12,996	12,289	DARTMOUTH	23,966	27,244	31,019
BELCHERTOWN	8,339	10,579	12,844	DEDHAM	25,298	23,782	23,288
BELLINGHAM	14,300	14,877	15,567	DEERFIELD	4,517	5,018	5,109
BELMONT	26,100	24,720	25,035	DENNIS	12,360	13,864	15,139
BERKLEY	2,731	4,237	5,750	DIGHTON	5,352	5,631	6,316
BERLIN	2,215	2,293	2,386	DOUGLAS	3,730	5,438	6,744
BERNARDSTON	1,750	2,048	2,119	DOVER	4,703	4,915	5,763
BEVERLY	37,655	38,195	40,210	DRACUT	21,249	25,594	28,585
BILLERICA	36,727	37,609	38,688	DUDLEY	8,717	9,540	10,009
BLACKSTONE	6,570	8,023	9,020	DUNSTABLE	1,671	2,236	2,893
BLANDFORD	1,038	1,187	1,212	DUXBURY	11,807	13,895	14,862
BOLTON	2,530	3,134	4,239	EAST BRIDGEWATER	9,945	11,104	13,322
BOSTON	562,994	574,283	576,554	EAST BROOKFIELD	1,955	2,033	2,166
BOURNE	13,874	16,064	17,834	EAST LONGMEADOW	12,905	13,367	14,435
BOXBOROUGH	3,126	3,343	4,788	EASTHAM	3,472	4,462	5,170
BOXFORD	5,374	6,266	8,378	EASTHAMPTON	15,580	15,537	15,963
BOYLSTON	3,470	3,517	3,907	EASTON	16,623	19,807	22,437
BRAINTREE	36,337	33,836	34,095	EDGARTOWN	2,204	3,062	3,870
BREWSTER	5,226	8,440	10,110	EGREMONT	1,311	1,229	1,312
BRIDGEWATER	17,202	21,249	25,480	ERVING	1,326	1,372	1,484
BRIMFIELD	2,318	3,001	3,358	ESSEX	2,998	3,260	3,240
BROCKTON	95,172	92,788	92,700	EVERETT	37,195	35,701	37,494
BROOKFIELD	2,397	2,968	3,136	FAIRHAVEN	15,759	16,132	16,119
BROOKLINE	55,062	54,718	58,917	FALL RIVER	92,574	92,703	90,655
BUCKLAND	1,864	1,928	1,973	FALMOUTH	23,640	27,960	30,970
BURLINGTON	23,486	23,302	24,082	FITCHBURG	39,580	41,194	39,613

Table F-3 (continued). Massachusetts Population by City and Town: 1980, 1990, and 2000 Census							
City/Town	1980	1990	2000	City/Town	1980	1990	2000
FLORIDA	730	742	768	LANESBOROUGH	3,131	3,032	3,110
FOXBOROUGH	14,148	14,637	16,462	LAWRENCE	63,175	70,207	71,228
FRAMINGHAM	65,113	64,989	66,773	LEE	6,247	5,849	5,937
FRANKLIN	18,217	22,095	29,267	LEICESTER	9,446	10,191	10,439
FREETOWN	7,058	8,522	8,896	LENOX	6,523	5,069	4,931
GARDNER	17,900	20,125	21,154	LEOMINSTER	34,508	38,145	41,631
GEORGETOWN	5,687	6,384	7,543	LEVERETT	1,471	1,785	1,867
GILL	1,259	1,583	1,523	LEXINGTON	29,479	28,974	31,090
GLOUCESTER	27,768	28,716	29,905	LEYDEN	498	662	777
GOSHEN	651	830	923	LINCOLN	7,098	7,666	8,563
GOSNOLD	63	98	123	LITTLETON	6,970	7,051	8,048
GRAFTON	11,238	13,035	14,881	LONGMEADOW	16,301	15,467	15,460
GRANBY	5,380	5,565	6,063	LOWELL	92,418	103,439	105,854
GRANVILLE	1,204	1,403	1,518	LUDLOW	18,150	18,820	19,693
BARRINGTON	7,405	7,725	7,828	LUNENBURG	8,405	9,117	9,394
GREENFIELD	18,436	18,666	18,031	LYNN	78,471	81,245	86,298
GROTON	6,154	7,511	9,401	LYNNFIELD	11,267	11,274	11,799
GROVELAND	5,040	5,214	6,041	MALDEN	53,386	53,884	55,064
HADLEY	4,125	4,231	4,663	MANCHESTER	5,424	5,286	5,391
HALIFAX	5,513	6,526	7,513	MANSFIELD	13,453	16,568	21,476
HAMILTON	6,960	7,280	8,427	MARBLEHEAD	20,126	19,971	20,771
HAMPDEN	4,745	4,709	4,891	MARION	3,932	4,496	5,560
HANCOCK	643	628	727	MARLBOROUGH	30,617	31,813	35,157
HANOVER	11,358	11,912	13,412	MARSHFIELD	20,916	21,531	23,822
HANSON	8,617	9,028	9,429	MASHPEE	3,700	7,884	11,568
HARDWICK	2,272	2,385	2,684	MATTAPOISETT	5,597	5,850	6,249
HARVARD	12,170	12,329	9,885	MAYNARD	9,590	10,325	10,585
HARWICH	8,971	10,275	11,828	MEDFIELD	10,220	10,531	12,213
HATFIELD	3,045	3,184	3,205	MEDFORD	58,076	57,407	56,916
HAVERHILL	46,865	51,418	58,119	MEDWAY	8,447	9,931	12,101
HAWLEY	280	317	339	MELROSE	30,055	28,150	26,912
HEATH	482	716	822	MENDON	3,108	4,010	5,125
HINGHAM	20,339	19,821	20,530	MERRIMAC	4,451	5,166	6,337
HINSDALE	1,707	1,959	2,009	METHUEN	36,701	39,990	42,966
HOLBROOK	11,140	11,041	11,017	MIDDLEBOROUGH	16,404	17,867	19,983
HOLDEN	13,336	14,628	15,875	MIDDLEFIELD	385	392	503
HOLLAND	1,589	2,185	2,412	MIDDLETON	4,135	4,921	7,056
HOLLISTON	12,622	12,926	14,432	MILFORD	23,390	25,355	25,897
HOLYOKE	44,678	43,704	40,504	MILLBURY	11,808	12,228	12,636
HOPEDALE	3,905	5,666	6,071	MILLIS	6,908	7,613	7,836
HOPKINTON	7,114	9,191	12,756	MILLVILLE	1,693	2,236	2,786
HUBBARDSTON	1,797	2,797	3,844	MILTON	25,860	25,725	26,725
HUDSON	16,408	17,233	17,951	MONROE	179	115	102
HULL	9,714	10,466	11,200	MONSON	7,315	7,776	8,835
HUNTINGTON	1,804	1,987	2,236	MONTAGUE	8,011	8,316	8,095
IPSWICH	11,158	11,873	12,566	MONTEREY	818	805	925
KINGSTON	7,362	9,045	11,242	MONTGOMERY	637	759	709
LAKEVILLE	5,931	7,785	9,668	MOUNT WASHINGTON	93	135	152
LANCASTER	6,334	6,661	7,432	NAHANT	3,947	3,828	3,748



**Table F-3 (continued). Massachusetts Population by City and Town: 1980, 1990, and 2000 Census**

City/Town	1980	1990	2000	City/Town	1980	1990	2000
NANTUCKET	5,087	6,012	8,651	READING	22,678	22,539	23,953
NATICK	29,461	30,510	32,094	REHOBOTH	7,570	8,656	10,188
NEEDHAM	27,901	27,557	28,427	REVERE	42,423	42,786	43,681
NEW ASHFORD	159	192	238	RICHMOND	1,659	1,677	1,740
NEW BEDFORD	98,478	99,922	94,347	ROCHESTER	3,205	3,921	4,623
NEW BRAINTREE	671	881	997	ROCKLAND	15,695	16,123	17,608
MARLBOROUGH	1,160	1,240	1,538	ROCKPORT	6,345	7,482	8,043
NEW SALEM	688	802	898	ROWE	336	378	371
NEWBURY	4,529	5,623	6,666	ROWLEY	3,867	4,452	5,434
NEWBURYPORT	15,900	16,317	16,988	ROYALSTON	955	1,147	1,205
NEWTON	83,622	82,585	87,211	RUSSELL	1,570	1,594	1,734
NORFOLK	6,363	9,270	10,506	RUTLAND	4,334	4,936	6,123
NORTH ADAMS	18,063	16,797	15,675	SALEM	38,220	38,091	40,348
NORTH ANDOVER	20,129	22,792	26,785	SALISBURY	5,973	6,882	7,554
NORTH ATTLEBORO	21,095	25,038	26,858	SANDSFIELD	720	667	801
BROOKFIELD	4,150	4,708	4,893	SANDWICH	8,727	15,489	19,908
NORTH READING	11,455	12,002	13,250	SAUGUS	24,746	25,549	25,898
NORTHAMPTON	29,286	29,289	29,435	SAVOY	644	634	697
NORTHBOROUGH	10,568	11,929	13,698	SCITUATE	17,317	16,786	17,380
NORTHBRIDGE	12,246	13,371	13,573	SEEKONK	12,269	13,046	13,789
NORTHFIELD	2,386	2,838	2,955	SHARON	13,601	15,517	17,276
NORTON	12,690	14,265	17,214	SHEFFIELD	2,743	2,910	3,347
NORWELL	9,182	9,279	9,981	SHELBURNE	2,002	2,012	2,178
NORWOOD	29,711	28,700	28,779	SHERBORN	4,049	3,989	4,284
OAK BLUFFS	1,984	2,804	3,692	SHIRLEY	5,124	6,118	7,143
OAKHAM	994	1,503	1,762	SHREWSBURY	22,674	24,146	30,390
ORANGE	6,844	7,312	7,710	SHUTESBURY	1,049	1,561	1,954
ORLEANS	5,306	5,838	6,434	SOMERSET	18,813	17,655	18,067
OTIS	963	1,073	1,281	SOMERVILLE	77,372	76,210	77,838
OXFORD	11,680	12,588	13,457	SOUTH HADLEY	16,399	16,685	17,678
PALMER	11,389	12,054	12,564	SOUTHAMPTON	4,137	4,478	5,321
PAXTON	3,762	4,047	4,551	SOUTHBOROUGH	6,193	6,628	8,419
PEABODY	45,976	47,039	49,595	SOUTHBRIDGE	16,665	17,816	17,489
PELHAM	1,112	1,373	1,463	SOUTHWICK	7,382	7,667	8,885
PEMBROKE	13,487	14,544	16,433	SPENCER	10,774	11,645	11,907
PEPPERELL	8,061	10,098	11,435	SPRINGFIELD	152,319	156,983	151,292
PERU	633	779	850	STERLING	5,440	6,481	7,416
PETERSHAM	1,024	1,131	1,212	STOCKBRIDGE	2,328	2,408	2,315
PHILLIPSTON	953	1,485	1,814	STONEHAM	21,424	22,203	22,020
PITTSFIELD	51,974	48,622	46,284	STOUGHTON	26,710	26,777	28,133
PLAINFIELD	425	571	594	STOW	5,144	5,328	5,715
PLAINVILLE	5,857	6,871	7,913	STURBRIDGE	5,976	7,775	8,082
PLYMOUTH	35,913	45,608	51,447	SUDBURY	14,027	14,358	16,260
PLYMPTON	1,974	2,384	2,690	SUNDERLAND	2,929	3,399	3,792
PRINCETON	2,425	3,189	3,470	SUTTON	5,855	6,824	8,153
PROVINCETOWN	3,536	3,561	3,372	SWAMPSCOTT	13,837	13,650	14,704
QUINCY	84,743	84,985	87,570	SWANSEA	15,461	15,411	16,079
RANDOLPH	28,218	30,093	31,630	TAUNTON	45,001	49,832	55,183
RAYNHAM	9,085	9,867	11,525	TEMPLETON	6,070	6,438	6,955

**Table F-3 (continued). Massachusetts Population by City and Town: 1980, 1990, and 2000 Census**

City/Town	1980	1990	2000	City/Town	1980	1990	2000
TEWKSBURY	24,635	27,266	29,603	WINCHESTER	20,701	20,267	20,892
TISBURY	2,972	3,120	3,674	WINDSOR	598	770	839
TOLLAND	235	289	396	WINTHROP	19,294	18,127	17,750
TOPSFIELD	5,709	5,754	6,330	WOBBURN	36,626	35,943	37,148
TOWNSEND	7,201	8,496	9,424	WORCESTER	161,799	169,759	170,915
TRURO	1,486	1,573	1,960	WORTHINGTON	932	1,156	1,305
TYNGSBOROUGH	5,683	8,642	10,716	WRENTHAM	7,580	9,006	10,515
TYRINGHAM	344	369	391	YARMOUTH	18,449	21,174	23,767
UPTON	3,886	4,677	5,540				
UXBRIDGE	8,374	10,415	11,752	Statewide Totals	5,640,985	5,919,881	6,349,097
WAKEFIELD	24,895	24,825	25,045				
WALES	1,177	1,566	1,759				
WALPOLE	18,859	20,212	23,085				
WALTHAM	58,200	57,878	59,243				
WARE	8,953	9,808	9,820				
WAREHAM	18,457	19,232	20,575				
WARREN	3,777	4,437	4,815				
WARWICK	603	740	778				
WASHINGTON	587	615	572				
WATERTOWN	34,384	33,284	32,399				
WAYLAND	12,170	11,874	13,128				
WEBSTER	14,480	16,196	16,313				
WELLESLEY	27,209	26,615	27,716				
WELLFLEET	2,209	2,493	2,687				
WENDELL	694	899	1,062				
WENHAM	3,897	4,212	5,014				
WEST BOYLSTON	6,204	6,611	7,508				
BRIDGEWATER	6,359	6,389	6,760				
WEST BROOKFIELD	3,026	3,532	3,683				
WEST NEWBURY	2,861	3,421	4,027				
WEST SPRINGFIELD	27,042	27,537	28,425				
STOCKBRIDGE	1,280	1,483	1,447				
WEST TISBURY	1,010	1,704	2,338				
WESTBOROUGH	13,619	14,133	17,320				
WESTFIELD	36,465	38,372	40,511				
WESTFORD	13,434	16,392	20,130				
WESTHAMPTON	1,137	1,327	1,515				
WESTMINSTER	5,139	6,191	7,014				
WESTON	11,169	10,200	11,316				
WESTPORT	13,763	13,852	14,805				
WESTWOOD	13,212	12,557	14,015				
WEYMOUTH	55,601	54,063	53,878				
WHATELY	1,341	1,375	1,466				
WHITMAN	13,534	13,240	13,580				
WILBRAHAM	12,053	12,635	13,478				
WILLIAMSBURG	2,237	2,515	2,599				
WILLIAMSTOWN	8,741	8,220	8,731				
WILMINGTON	17,471	17,651	20,839				
WINCHENDON	7,019	8,805	9,532				

**Table F-4. Population Counts and Estimates, Massachusetts: 1980, 1985-2000**

AGE GROUP	YEAR	TOTAL	MALE	FEMALE
0 - 4	1980	337,215	173,029	164,186
	1985	379,282	194,237	185,045
	1986	387,696	198,479	189,217
	1987	396,109	202,720	193,389
	1988	404,522	206,962	197,560
	1989	412,935	211,203	201,732
	1990	421,349	215,445	205,904
	1991	424,617	217,179	207,438
	1992	425,142	217,537	207,605
	1993	424,647	217,471	207,176
	1994	421,986	216,493	205,493
	1995	415,741	213,448	202,293
	1996	409,660	210,345	199,315
	1997	404,223	207,394	196,829
	1998	399,860	204,983	194,877
	1999	399,310	204,397	194,913
	2000	397,268	203,062	194,206
5 - 9	1980	374,734	191,602	183,132
	1985	375,677	192,542	183,135
	1986	375,865	192,730	183,135
	1987	376,054	192,918	183,136
	1988	376,242	193,106	183,136
	1989	376,431	193,294	183,137
	1990	376,619	193,482	183,137
	1991	384,465	197,306	187,159
	1992	388,956	199,564	189,392
	1993	392,430	201,241	191,189
	1994	399,236	204,404	194,832
	1995	404,660	206,980	197,680
	1996	410,066	209,813	200,253
	1997	414,757	212,313	202,444
	1998	414,810	212,483	202,327
	1999	423,609	217,197	206,412
	2000	430,861	221,145	209,716
10 - 14	1980	461,332	235,669	225,663
	1985	404,174	206,784	197,390
	1986	392,742	201,007	191,735
	1987	381,311	195,230	186,081
	1988	369,879	189,453	180,426
	1989	358,448	183,676	174,772
	1990	347,016	177,899	169,117
	1991	355,502	182,288	173,214
	1992	358,775	184,070	174,705
	1993	363,655	186,671	176,984
	1994	368,790	189,353	179,437
	1995	372,452	191,298	181,154
	1996	380,540	195,292	185,248
	1997	388,421	199,263	189,158
	1998	391,860	200,941	190,919
	1999	412,311	211,441	200,870
	2000	431,247	221,168	210,079

Table F-4 (continued). Population Counts and Estimates, Massachusetts: 1980, 1985-2000

AGE GROUP	YEAR	TOTAL	MALE	FEMALE
15-19	1980	548,239	274,859	273,380
	1985	482,135	242,074	240,061
	1986	468,914	235,517	233,397
	1987	455,693	228,960	226,733
	1988	442,472	222,403	220,069
	1989	429,251	215,846	213,405
	1990	416,030	209,289	206,741
	1991	391,939	197,402	194,537
	1992	383,111	192,951	190,160
	1993	383,138	192,863	190,275
	1994	389,017	195,597	193,420
	1995	397,926	200,053	197,873
	1996	407,088	204,859	202,229
	1997	410,740	207,139	203,601
	1998	418,478	211,026	207,452
	1999	417,862	211,120	206,742
	2000	415,737	210,460	205,277
20-24	1980	552,902	270,713	282,189
	1985	535,048	263,685	271,363
	1986	531,477	262,279	269,198
	1987	527,907	260,874	267,033
	1988	524,335	259,468	264,867
	1989	520,765	258,063	262,702
	1990	517,194	256,657	260,537
	1991	514,576	255,360	259,216
	1992	516,059	256,092	259,967
	1993	508,509	252,385	256,124
	1994	497,732	247,056	250,676
	1995	486,412	241,442	244,970
	1996	469,010	232,807	236,203
	1997	463,895	230,140	233,755
	1998	465,352	230,886	234,466
	1999	435,534	215,192	220,342
	2000	404,279	198,756	205,523
25-29	1980	489,175	239,341	249,834
	1985	522,748	258,318	264,430
	1986	529,462	262,113	267,349
	1987	536,177	265,909	270,268
	1988	542,891	269,704	273,187
	1989	549,606	273,500	276,106
	1990	556,320	277,295	279,025
	1991	540,234	268,978	271,256
	1992	529,711	263,810	265,901
	1993	518,304	258,294	260,010
	1994	512,557	255,973	256,584
	1995	510,664	255,351	255,313
	1996	514,088	257,258	256,830
	1997	511,765	256,137	255,628
	1998	502,345	251,390	250,955
	1999	468,891	232,721	236,170
	2000	434,024	213,376	220,648

Table F-4 (continued). Population Counts and Estimates, Massachusetts: 1980, 1985-2000

AGE GROUP	YEAR	TOTAL	MALE	FEMALE
30-34	1980	446,395	217,649	228,746
	1985	494,363	243,175	251,188
	1986	503,956	248,280	255,676
	1987	513,549	253,385	260,164
	1988	523,143	258,491	264,652
	1989	532,737	263,596	269,141
	1990	542,330	268,701	273,629
	1991	547,724	272,103	275,621
	1992	543,398	270,256	273,142
	1993	539,945	268,647	271,298
	1994	537,869	267,675	270,194
	1995	529,735	263,782	265,953
	1996	518,478	258,141	260,337
	1997	512,473	255,510	256,963
	1998	502,992	251,066	251,926
	1999	498,617	247,105	251,512
	2000	492,764	242,386	250,378
35-39	1980	348,552	169,502	179,050
	1985	414,863	203,352	211,511
	1986	428,125	210,122	218,003
	1987	441,387	216,892	224,495
	1988	454,650	223,662	230,988
	1989	467,912	230,432	237,480
	1990	481,174	237,202	243,972
	1991	492,003	242,601	249,402
	1992	501,299	247,290	254,009
	1993	508,723	251,039	257,684
	1994	517,102	255,251	261,851
	1995	522,467	258,017	264,450
	1996	527,036	260,758	266,278
	1997	525,899	260,595	265,304
	1998	522,796	259,389	263,407
	1999	532,463	263,328	269,135
	2000	540,593	266,507	274,086
40-44	1980	278,748	134,925	143,823
	1985	356,061	173,162	182,899
	1986	371,523	180,809	190,714
	1987	386,986	188,457	198,529
	1988	402,449	196,104	206,345
	1989	417,912	203,752	214,160
	1990	433,374	211,399	221,975
	1991	452,459	221,123	231,336
	1992	448,133	219,257	228,876
	1993	450,944	220,919	230,025
	1994	458,221	224,614	233,607
	1995	466,848	229,037	237,811
	1996	477,644	234,298	243,346
	1997	489,729	240,396	249,333
	1998	496,569	243,966	252,603
	1999	510,253	250,285	259,968
	2000	522,402	255,838	266,564

**Table F-4 (continued). Population Counts and Estimates, Massachusetts: 1980, 1985-2000**

AGE GROUP	YEAR	TOTAL	MALE	FEMALE
45-49	1980	278,261	134,444	143,817
	1985	305,798	148,540	157,258
	1986	311,305	151,359	159,946
	1987	316,812	154,178	162,634
	1988	322,320	156,998	165,322
	1989	327,827	159,817	168,010
	1990	333,334	162,636	170,698
	1991	347,758	169,614	178,144
	1992	372,449	181,639	190,810
	1993	388,267	189,222	199,045
	1994	405,627	197,458	208,169
	1995	424,194	206,334	217,860
	1996	440,676	214,576	226,100
	1997	439,700	214,255	225,445
	1998	442,352	215,783	226,569
	1999	452,918	220,796	232,122
	2000	461,945	225,029	236,916
50-54	1980	306,574	146,211	160,363
	1985	284,588	136,396	148,192
	1986	280,190	134,433	145,757
	1987	275,793	132,470	143,323
	1988	271,396	130,507	140,889
	1989	266,998	128,544	138,454
	1990	262,601	126,581	136,020
	1991	266,799	128,835	137,964
	1992	274,537	132,602	141,935
	1993	291,124	140,790	150,334
	1994	305,629	148,204	157,425
	1995	317,854	154,500	163,354
	1996	331,747	161,214	170,533
	1997	359,036	174,461	184,575
	1998	376,308	182,775	193,533
	1999	394,565	191,345	203,220
	2000	411,408	199,205	212,203
55-59	1980	310,995	145,603	165,392
	1985	281,585	132,889	148,696
	1986	275,702	130,346	145,356
	1987	269,820	127,803	142,017
	1988	263,939	125,261	138,678
	1989	258,056	122,718	135,338
	1990	252,174	120,175	131,999
	1991	243,598	116,332	127,266
	1992	239,741	114,800	124,941
	1993	238,223	114,215	124,008
	1994	240,256	115,150	125,106
	1995	243,035	116,491	126,544
	1996	248,445	119,247	129,198
	1997	258,444	124,059	134,385
	1998	275,482	132,476	143,006
	1999	293,440	141,003	152,437
	2000	310,002	148,841	161,161



Table F-4 (continued). Population Counts and Estimates, Massachusetts: 1980, 1985-2000

AGE GROUP	YEAR	TOTAL	MALE	FEMALE
60-64	1980	277,384	126,323	151,061
	1985	269,645	123,966	145,679
	1986	268,097	123,495	144,602
	1987	266,549	123,023	143,526
	1988	265,001	122,552	142,449
	1989	263,453	122,080	141,373
	1990	261,905	121,609	140,296
	1991	252,853	117,797	135,056
	1992	243,758	113,682	130,076
	1993	236,302	110,383	125,919
	1994	229,887	107,716	122,171
	1995	225,426	105,979	119,447
	1996	221,450	104,381	117,069
	1997	220,318	104,206	116,112
	1998	220,073	104,333	115,740
	1999	228,893	108,256	120,637
	2000	236,405	111,504	124,901
65-69	1980	235,574	101,023	134,551
	1985	243,479	105,724	137,755
	1986	245,060	106,664	138,396
	1987	246,641	107,604	139,037
	1988	248,221	108,544	139,677
	1989	249,802	109,484	140,318
	1990	251,383	110,424	140,959
	1991	242,200	107,138	135,062
	1992	239,439	106,603	132,836
	1993	236,419	106,028	130,391
	1994	233,259	105,261	127,998
	1995	229,328	103,887	125,441
	1996	226,174	102,090	124,084
	1997	220,342	99,675	120,667
	1998	224,578	102,051	122,527
	1999	221,157	100,777	120,380
	2000	216,498	98,882	117,616
70-74	1980	187,041	73,235	113,806
	1985	197,186	79,388	117,798
	1986	199,215	80,619	118,596
	1987	201,244	81,849	119,395
	1988	203,273	83,080	120,193
	1989	205,302	84,310	120,992
	1990	207,331	85,541	121,790
	1991	206,064	85,541	120,523
	1992	207,286	86,411	120,875
	1993	207,610	86,774	120,836
	1994	209,543	88,009	121,534
	1995	211,201	89,345	121,856
	1996	210,014	88,742	121,272
	1997	209,512	89,113	120,399
	1998	217,425	93,318	124,107
	1999	214,991	92,667	122,324
	2000	211,332	91,416	119,916

Table F-4 (continued). Population Counts and Estimates, Massachusetts: 1980, 1985-2000

AGE GROUP	YEAR	TOTAL	MALE	FEMALE
75-79	1980	137,828	48,145	89,683
	1985	148,741	53,591	95,150
	1986	150,923	54,680	96,243
	1987	153,105	55,769	97,336
	1988	155,298	56,869	98,429
	1989	157,471	57,948	99,523
	1990	159,653	59,037	100,616
	1991	157,534	59,176	98,358
	1992	157,819	59,824	97,995
	1993	158,987	60,752	98,235
	1994	161,268	62,072	99,196
	1995	162,986	63,262	99,724
	1996	166,496	64,548	101,948
	1997	169,323	66,029	103,294
	1998	178,254	69,719	108,535
	1999	182,156	72,061	110,095
	2000	184,941	73,829	111,112
80-84	1980	92,180	28,513	63,667
	1985	99,240	30,991	68,249
	1986	100,651	31,486	69,165
	1987	102,064	31,982	70,082
	1988	103,475	32,477	70,998
	1989	104,888	32,973	71,915
	1990	106,299	33,468	72,831
	1991	106,558	33,989	72,569
	1992	108,271	34,969	73,302
	1993	109,369	35,782	73,587
	1994	110,817	36,721	74,096
	1995	112,913	37,919	74,994
	1996	114,039	38,664	75,375
	1997	114,787	39,273	75,514
	1998	121,228	41,932	79,296
	1999	126,467	44,435	82,032
	2000	130,699	46,464	84,235
85+	1980	73,908	20,107	53,801
	1985	82,124	21,006	61,118
	1986	83,767	21,186	62,581
	1987	85,410	21,366	64,044
	1988	87,052	21,545	65,507
	1989	88,696	21,725	66,971
	1990	90,339	21,905	68,434
	1991	91,218	22,231	68,987
	1992	99,184	24,479	74,705
	1993	106,943	26,789	80,154
	1994	107,996	27,258	80,738
	1995	108,970	27,600	81,370
	1996	111,703	28,439	83,264
	1997	114,258	29,558	84,700
	1998	120,501	31,447	89,054
	1999	119,093	31,435	87,658
	2000	116,692	30,948	85,744



**Table F-4. (continued) Population Counts and Estimates, Massachusetts: 1980, 1985-2000**


AGE GROUP	YEAR	TOTAL	MALE	FEMALE
TOTAL	1980	5,737,037	2,730,893	3,006,144
	1985	5,876,737	2,809,820	3,066,917
	1986	5,904,670	2,825,604	3,079,066
	1987	5,932,611	2,841,389	3,091,222
	1988	5,960,548	2,857,176	3,103,372
	1989	5,988,490	2,872,961	3,115,529
	1990	6,016,425	2,888,745	3,127,680
	1991	6,018,101	2,894,993	3,123,108
	1992	6,037,068	2,905,836	3,131,232
	1993	6,063,539	2,920,265	3,143,274
	1994	6,106,792	2,944,265	3,162,527
	1995	6,142,812	2,964,725	3,178,087
	1996	6,184,354	2,985,472	3,198,882
	1997	6,227,622	3,009,516	3,218,106
	1998	6,291,263	3,039,964	3,251,299
	1999	6,332,530	3,055,561	3,276,969
	2000	6,349,097	3,058,816	3,290,281



## APPENDICES



USE ONLY STATE APPROVED RIBBONS AND MASS. STANDARD INK  
AS REQUIRED BY GEN. LAWS, CHAP. 66, SECT. 4

1. RECORD NUMBER  612901		3C. CITY/TOWN		 <p>The Commonwealth of Massachusetts DEPARTMENT OF PUBLIC HEALTH REGISTRY OF VITAL RECORDS AND STATISTICS STANDARD CERTIFICATE OF LIVE BIRTH</p>		STATE USE ONLY	
1A. CERTIFICATE NUMBER (DPH USE ONLY)		3B. COUNTY				3D. REGISTERED NUMBER	
2. FACILITY NUMBER		3A. FACILITY NAME-IF NOT IN FACILITY, NUMBER AND STREET		4C. LAST			
5. SEX		6A. PLURALITY		7. TIME		8. DATE OF BIRTH (Month, Day, Year)	
9A. NAME		9B. TITLE		9D. LICENSE NUMBER			
9C. CERTIFIER TYPE		9E. NUMBER AND STREET		9F. CITY/TOWN		9G. STATE	
9H. ZIP CODE		10A. FIRST		10B. MIDDLE		10C. LAST	
10D. MAIDEN SURNAME		11A. CITY/TOWN		11B. STATE/COUNTRY		12. DATE OF BIRTH (Month, Day, Year)	
13A. NUMBER AND STREET (Do not use mailing address)		13B. CITY/TOWN		13C. COUNTY		13D. STATE	
13E. ZIP CODE		14A. FIRST		14B. MIDDLE		14C. LAST	
15A. CITY/TOWN		15B. STATE/COUNTRY		16. DATE OF BIRTH (Month, Day, Year)			
17A. I (WE) CERTIFY THAT THE PERSONAL INFORMATION APPEARING ABOVE IS TRUE AND CORRECT.		17B. RELATIONSHIP TO CHILD					
17C. DATE SIGNED (Month, Day, Year)		17D. MAILING ADDRESS (If different from item # 13 above)		CITY		STATE	
18. DATE OF RECORD (Month, Day, Year)		19. SUPPLEMENT FILED (Month, Day, Year)		20. CLERK/REGISTRAR			
21. DPH USE ONLY							

STANDARD CERTIFICATE OF DEATH  
REGISTRY OF VITAL RECORDS AND STATISTICS

STATE USE ONLY											
44	PLACE										
46	HOSP.										
5	TYPE										
7	<table border="1"> <tr> <td>7</td> <td>NET.</td> </tr> <tr> <td>8</td> <td> <table border="1"> <tr> <td>8</td> <td>HSP</td> <td>9</td> <td>PLAC</td> </tr> </table> </td> </tr> <tr> <td>9</td> <td>EDUC.</td> </tr> </table>	7	NET.	8	<table border="1"> <tr> <td>8</td> <td>HSP</td> <td>9</td> <td>PLAC</td> </tr> </table>	8	HSP	9	PLAC	9	EDUC.
7	NET.										
8	<table border="1"> <tr> <td>8</td> <td>HSP</td> <td>9</td> <td>PLAC</td> </tr> </table>	8	HSP	9	PLAC						
8	HSP	9	PLAC								
9	EDUC.										
10	AGE										
11	NATIVITY										
12	MARITAL										
14	RESID.										
15	OUT-STATE										
21	<table border="1"> <tr> <td>21</td> <td>DISP.</td> </tr> <tr> <td>21-32</td> <td>AUTO</td> </tr> </table>	21	DISP.	21-32	AUTO						
21	DISP.										
21-32	AUTO										
23	MED EXAM										
34	MANNER										
40	WORK SH										
50	PLACE										
5-30	CERT										
54	PR PRO										

DECEDENT

**INFORMANT**

**DISPOSITION**

**CERTIFIER**

1 DECEASED - NAME FIRST		MIDDLE		LAST		REGISTERED NUMBER		STATE USE ONLY	
2 PLACE OF DEATH (City/Town)		3 COUNTY OF DEATH		4 HOSPITAL OR OTHER INSTITUTION - Name (if not in either, give street and number)		5		6	
7 PLACE OF DEATH (Check only one): HOSPITAL: <input type="checkbox"/> Inpatient <input type="checkbox"/> ER/Outpatient <input type="checkbox"/> DQA <input type="checkbox"/> OTHER: <input type="checkbox"/> Nursing Home <input type="checkbox"/> Residence <input type="checkbox"/> Other (Specify)		8 SOCIAL SECURITY NUMBER		9 IF US WAR VETERAN SPECIFY WAR		10		11	
12 WAS DECEDENT OF HISPANIC ORIGIN? (If yes, Specify Puerto Rican, Dominican, Cuban, etc.) C/M/D <input type="checkbox"/> YES <input type="checkbox"/> NO B3 Specify:		13 RACE (e.g. White, Black, American Indian, etc.) (Specify)		14 DECEDENT'S EDUCATION (Highest Grade Completed) Elem/Sec (D-12) College (1-4 +)		15		16	
17 AGE - Last Birthday (Yr.)		18 UNDER 1 YEAR MOS + DAYS		19 UNDER 1 DAY HOURS + MINS		20 DATE OF BIRTH (Mo., Day, Yr.)		21 BIRTHPLACE (City and State or Foreign Country)	
22 MARRIED, NEVER MARRIED WIDOWED OR DIVORCED		23 LAST SPOUSE (If wife, give maiden name)		24 USUAL OCCUPATION (Prior - if retired)		25 KIND OF BUSINESS OR INDUSTRY		26	
27 RESIDENCE - NO. & ST., CITY/TOWN, COUNTY, STATE, ZIP CODE		28		29		30		31	
32 FATHER - FULL NAME		33 DATE OF BIRTH (If not in US, name country)		34 MOTHER - NAME (GIVEN)		35 (MAIDEN)		36 STATE OF BIRTH (If not in US, name country)	
37 INFORMANT'S NAME		38 MAILING ADDRESS - NO. & ST., CITY/TOWN, STATE, ZIP CODE		39		40		41 RELATIONSHIP	
42 METHOD OF DISPOSITION <input type="checkbox"/> BURIAL <input type="checkbox"/> CREMATION <input type="checkbox"/> ENTOMBMENT <input type="checkbox"/> REMOVAL FROM STATE <input type="checkbox"/> DONATION <input type="checkbox"/> OTH. SPEC.		43 FUNERAL SERVICE LICENSEE		44 LICENSE #		45		46	
47 PLACE OF DISPOSITION (Name of Cemetery, Crematory or other)		48		49 LOCATION (City/Town, State)		50		51	
52 DATE OF DISPOSITION (Mo., Day, Yr.)		53 NAME AND ADDRESS OF FACILITY		54		55		56	
57 PART I - Enter the diseases, injuries, or complications that caused the death. Do not use only the mode of dying, such as cardiac or respiratory arrest, shock or heart failure. List only one cause on each line (a through d). PRINT OR TYPE LEGIBLY.		58		59		60		61	
62 IMMEDIATE CAUSE (Final disease or condition resulting in death) →		63		64		65		66	
67 Subsequently list conditions, if any leading to immediate cause. Enter UNDERLYING CAUSE (disease or injury that initiated events resulting in death) LAST.		68		69		70		71	
72 PART II - Other significant conditions contributing to death or complicating the underlying cause given in Part I.		73		74		75		76	
77 WAS CASE REFERRED TO M.E.? (Yes or No)		78 34 MANNER OF DEATH <input type="checkbox"/> NATURAL <input type="checkbox"/> HOMICIDE <input type="checkbox"/> SUICIDE <input type="checkbox"/> ACCIDENT <input type="checkbox"/> PENDING INVESTIGATION		79 35a DATE OF BURIAL (Mo., Day, Yr.)		80 35b TIME OF BURIAL		81 35c INJURY AT WORK (Yes or No)	
82 DESCRIBE HOW INJURY OCCURRED		83 PLACE OF INJURY - At home, farm, street, factory, office bldg., etc. Specify:		84 LOCATION (No. & St., City/Town, State)		85		86	
87 36a To the best of my knowledge, death occurred at the time, date, and place and due to the cause(s) stated (Signature and Title)		88 36b DATE SIGNED (Mo., Day, Yr.)		89 36c HOUR OF DEATH		90 37a On the basis of examination and/or investigation in my opinion death occurred at the time, date, and place and due to the cause(s) stated (Signature and Title)		91 37b DATE SIGNED (Mo., Day, Yr.)	
92 36d NAME OF ATTENDING PHYSICIAN IF NOT CERTIFIER		93		94 37c HOURS OF DEATH		95 37d PRONOUNCED DEAD (Mo., Day, Yr.)		96 37e PRONOUNCED DEAD (Hr.)	
97 NAME AND ADDRESS OF CERTIFYING PHYSICIAN OR MEDICAL EXAMINER (Type or Print)		98		99 37f LICENSE NO. OF CERTIFIER		100		101	
102 WAS THERE AN R.N. PRONOUNCING DEATH? (Yes or No)		103 IF YES, DATE PRONOUNCED		104 IF YES, TIME PRONOUNCED		105 40d NAME OF PRONOUNCING REGISTERED NURSE		106	
107 DATE BURIAL PERMIT ISSUED:		108 SIGNATURE - BD OF HEALTH AGENT		109		110 RECEIVED IN THE CITY/TOWN OF:		111	
112		113		114		115		116	

**BLACK INK ONLY**

R-301-89



DEPARTMENT OF PUBLIC HEALTH  
REGISTRY OF VITAL RECORDS AND STATISTICS  
**REPORT OF FETAL DEATH**

DATE OF RECORD

STATE USE ONLY

<b>FACILITY NUMBER</b>	FACILITY NAME (IF NOT HOSPITAL, GIVE STREET AND NUMBER)		DATE OF DELIVERY (Month Day Year)	
	CITY/TOWN OF DELIVERY	COUNTY OF DELIVERY	TIME OF DELIVERY	PLACE OF DEATH
<b>FETUS</b>	SEX		PLURALITY	BIRTH ORDER
	WEIGHT	WEEKS GESTATION AT DELIVERY DATE	DIED BEFORE LABOR / DURING LABOR OR DELIVERY	
<b>MOTHER</b>	CURRENT NAME FIRST MIDDLE LAST		DATE OF BIRTH	
	MAIDEN SURNAME	CITY AND STATE/COUNTRY OF BIRTH	RESIDENCE ADDRESS NUMBER AND STREET CITY/TOWN STATE ZIP	
<b>FATHER</b>	CURRENT NAME FIRST MIDDLE LAST		DATE OF BIRTH	
	CITY AND STATE/COUNTRY OF BIRTH		SPECIFY FETAL OR MATERNAL	
<b>CAUSE OF FETAL DEATH PART I</b>	IMMEDIATE CAUSE (a)		DUE TO OR AS A CONSEQUENCE OF (b)	
	DUE TO OR AS A CONSEQUENCE OF (c)		OTHER SIGNIFICANT CONDITIONS OF THE FETUS OR THE MOTHER	
<b>PART II</b>	WAS THE CASE REFERRED TO A MEDICAL EXAMINER?		WAS AN AUTOPSY PERFORMED?	WERE AUTOPSY FINDINGS AVAILABLE PRIOR TO THE COMPLETION OF CAUSE OF DEATH?
	DATE OF INJURY (MATERNAL)	TIME OF INJURY	INJURY AT WORK	PLACE OF INJURY
<b>CERTIFIER</b>	DESCRIBE HOW INJURY OCCURRED		LOCATION OF INJURY	
	I HEREBY CERTIFY that this delivery occurred on the date stated and the product of conception was not a live birth			
<b>ATTENDANT (if different)</b>	Signature of Certifying Physician or Medical Examiner		TITLE	
	Type or Print - Name of Certifying Physician or Medical Examiner		LICENSE #	
<b>DISPOSITION</b>	STREET ADDRESS		CITY/TOWN STATE ZIP CODE	
	NAME OF PHYSICIAN OR ATTENDANT/TITLE		LICENSE #	
<b>PERMIT</b>	METHOD		PLACE OF DISPOSITION (Name of Cemetery, Crematory, or other facility)	
	FURNERAL SERVICE LICENSEE (if any)		LOCATION (City or Town and State)	
<b>DISPOSITION</b>	NAME OF FACILITY (if any)		DATE OF DISPOSITION	
	DATE PERMIT ISSUED		CITY/TOWN ISSUING	
<b>PERMIT</b>	ISSUED BY (signature of Health Agent)		DATE OF DISPOSITION	

INSTRUCTIONS: Complete a Report of Fetal Death only for fetal deaths of twenty weeks or more gestation OR of a weight of 350 grams or more. Complete front and reverse sides of form within 10 days and send original copy to:

Registry of Vital Records and Statistics/ Natality Data Unit - FD,  
150 Mt. Vernon Street, 1<sup>st</sup> Floor, Dorchester, MA 02125

When forwarding for disposition permit: Do not send the original report to the local Board of Health. Photocopy and forward only the FRONT of this form. The original report must be sent to the Department of Public Health at the address listed above.



Commonwealth of Massachusetts  
DEPARTMENT OF PUBLIC HEALTH  
REGISTRY OF VITAL RECORDS AND STATISTICS

(State file number)

**THIS CERTIFICATE IS  
NOT TO BE USED  
OUTSIDE OF  
MASSACHUSETTS.**

**NOT VALID AFTER:**

**THIS IS A PERMANENT RECORD.**  
Use only ~~erasable~~ black ink or approved  
black typewriter ribbon. Every item of  
information should be carefully supplied.  
**ALTERATIONS AND ERASURES IN  
THIS CERTIFICATE ARE FORBID-  
DEN; PENALTY FOR VIOLATION,  
ONE HUNDRED DOLLARS.**

**COL. CHAP. 207, §§ 28, 28A, 48, 49,  
4, 57 and CHAP. 46, § 18.**

**1] MEDICAL  
CERTIFICATES  
ON FILE**

**2] COMMISSION  
ON FILE**

This certificate must be delivered to the person before whom the  
marriage is to be contracted before he proceeds to solemnize the same

(City or town making r

Registered No.

Intention No.

1 Place of Marriage

City or Town

(Do not enter name of village or section of city or town)

2 Date of Marriage

(Month)

(Day)

(Year)

3 FULL NAME

GROOM

12 FULL NAME

BRIDE

3A SURNAME  
AFTER MARRIAGE12A SURNAME  
AFTER MARRIAGE

4 DATE OF BIRTH

5 OCCUPATION

13 DATE OF BIRTH

14 OCCUPATION

6 RESIDENCE  
NO. & ST.  
CITY/  
TOWNZIP  
CODE15 RESIDENCE  
NO. & ST.  
CITY/  
TOWN

ST.

ZIP  
CODE7 NUMBER OF  
MARRIAGE  
(1st, 2nd, 3rd, etc.)8 WIDOWED  
OR DIVORCED16 NUMBER OF  
MARRIAGE  
(1st, 2nd, 3rd, etc.)17 WIDOWED  
OR DIVORCED

9 BIRTHPLACE

(City or town)

(State or country)

18 BIRTHPLACE

(City or town)

(State or country)

10 MAIDEN NAME  
OF MOTHER19 MAIDEN NAME  
OF MOTHER11 NAME OF  
FATHER20 NAME OF  
FATHER

21 THE INTENTION OF MARRIAGE by the above-mentioned persons was duly entered by me in the records of the Comm  
according to law, this \_\_\_\_\_ day of \_\_\_\_\_

☐ COURT WAIVER Issued

(Name of Community)

by

☐ AGE ORDER

(Month)

(Day)

(Year)

(City or Town Clerk or Registrar)

22 I HEREBY CERTIFY that I joined the above-named persons in marriage at No. \_\_\_\_\_

(If marriage was solemnized in a church, give its NAME instead of street and i

(Name of City or Town)

on \_\_\_\_\_

(Month)

(Day)

(Year)

Signature \_\_\_\_\_

Official station \_\_\_\_\_

(Minister of the Gospel, Clergyman, Priest, Rabbi, or Justice of th

Residence No. \_\_\_\_\_

St., City or Town of \_\_\_\_\_

23 Certificate recorded by city or town clerk \_\_\_\_\_

(Month)

(Day)

(Year)

CLERK OR REGISTRAR



The Commonwealth of Massachusetts  
 DEPARTMENT OF PUBLIC HEALTH  
 REGISTRY OF VITAL RECORDS AND STATISTICS  
 CERTIFICATE OF ABSOLUTE  
 DIVORCE OR ANNULMENT  
 (Chap. 20B, Sec. 46 G.L.)  
 R-408

HUSBAND - NAME		FIRST	MIDDLE	LAST
USUAL RESIDENCE - STREET ADDRESS			CITY, TOWN OR LOCATION	
2a	COUNTY		STATE	2b
DATE OF BIRTH (Mo., Day, Yr.)		NUMBER OF THIS MARRIAGE (1st, 2nd, Specify)		
2c	2d	3		4
WIFE - NAME		FIRST	MIDDLE	LAST
5a	USUAL RESIDENCE - STREET ADDRESS			MAIDEN NAME
CITY, TOWN OR LOCATION			5b	
6a	COUNTY		STATE	6b
DATE OF BIRTH (Mo., Day, Yr.)		NUMBER OF THIS MARRIAGE (1st, 2nd, Specify)		
6c	6d	7		8
9. DATE OF THIS MARRIAGE (Mo., Day, Yr.)	NUMBER OF CHILDREN BORN ALIVE OF THIS MARRIAGE		NUMBER OF CHILDREN UNDER AGE 18 IN THIS FAMILY	
9a	10a		10b	

<b>FOR COURT USE ONLY</b>			
COUNTY OF JUDGMENT		TITLE OF COURT	
11	DATE OF JUDGMENT NISI (Mo., Day, Yr.)		DATE OF JUDGMENT ABSOLUTE (Mo., Day, Yr.)
TYPE OF JUDGMENT - DIVORCE OR ANNULMENT (Specify)		14	
12	DOCKET NUMBER		CAUSE FOR WHICH GRANTED
13	NAME OF PLAINTIFF		17
SIGNATURE OF CERTIFYING OFFICIAL		TITLE OF OFFICIAL	
18a		18b	



REGISTRY OF VITAL RECORDS AND STATISTICS  
STAFF

REGISTRAR  
Stanley E. Nyberg

ADMINISTRATION

Karin A. Barrett, Assistant Registrar  
Dean L. DiMartino, Director  
Ramona A. Irving, Administrative Assistant  
Tuyet Luong

INFORMATION TECHNOLOGY

Howard Wong, Director  
Ian Skolnik

INFORMATION UNIT

Charlene J. Zion, Information Officer  
Kevin Y. Foster, Biostatistician

OPERATIONS UNIT

Pedro Fidalgo, Supervisor  
Steven Sears

STATISTICS UNIT

Jane K. Purtill, Director  
Paul A. Budrow  
Robert A. Coffin III  
Hailekiros Gabreegziabher  
Annie B. Hobbs  
Judy Y. Lim  
Maureen L. McKean  
Ann-Marie Neault  
Waleska Ortiz  
Sharon Pagnano  
Adele L. Pasciar  
Maria Vu

REGISTRATION UNIT

Pauline M. McNulty, Director  
June A. Deloney, Supervisor  
Denise O'Gara, Paralegal  
Crystal Steward, Paralegal  
Tara Andrews  
Irene Chu  
Pamela Corbin  
Carolyn Edwards  
Robert E. McMahan  
Venita B. Morabito  
Mary E. Risser  
MaryLou F. Rossetti  
Phyllis Rotman  
Monica Smith

RECORDS UNIT

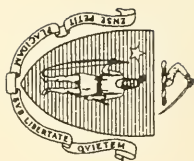
Harold L. Leonard, Supervisor  
Joseph R. Cummings, Supervisor  
Katherine Martinez, Vital Check Coordinator  
Michael Baker  
Christina Bocolos  
Trevor Hall  
Daniel Martel  
Donald T. McHugh  
Jim Orseno  
Jose Otero  
Simon Smith

BOSTON PUBLIC LIBRARY



3 9999 06351 821 9





Massachusetts Department of Public Health  
Center for Health Information, Statistics, Research and Evaluation  
Registry of Vital Records and Statistics  
150 Mt. Vernon Street, 1<sup>st</sup> Floor  
Dorchester MA 02125-3105